

VOLUME II - NUMBER 1

JANUARY - FEBRUARY 1961

DOES NOT CIRCULATE

PSYCHOSOMATICS

OFFICIAL PUBLICATION
OF THE
ACADEMY
OF
PSYCHOSOMATIC
MEDICINE

Academy Meetings for the Near Future:

Symposium on Anxiety and Depression

Sunday, June 25, 1961, Barbizon Plaza
Hotel, New York, N. Y.

Annual Meeting of the Academy

October 12 to 14, 1961, Hotel Emerson,
Baltimore, Md.

THE UNIVERSITY
OF MICHIGAN

MAR 7 1961

MEDICAL
LIBRARY

A
JOURNAL
EXPLORING
THE ROLE OF
PSYCHIATRY
IN THE
DAILY
PRACTICE
OF
TOTAL
MEDICINE

UNIVERSITY OF MICHIGAN LIBRARIES

If you are not already a member of the Academy of Psychosomatic Medicine or do not now subscribe to Psychomatics you will want to read the editorial on page 6 and fill in a coupon on page 59.



Tofranil

brand of imipramine hydrochloride

Geigy

Although depression is a common component of problems seen in medical practice, the classical symptoms of depression are seldom obvious. Much more frequently, depression lurks in the background... is often masked by physical symptoms such as fatigue, insomnia, poor appetite and weight loss... is frequently detectable only by careful questioning.

When depression complicates the picture, Tofranil relieves or eliminates symptoms in approximately 80 per cent of cases within 2-3 weeks.

Detailed literature available on request.

Tofranil[®], brand of imipramine hydrochloride: Tablets of 25 mg. and tablets of 10 mg. for geriatric and adolescent use; also, ampuls for intramuscular administration only, each containing 25 mg. in 2 cc. of solution (1.25 per cent).

Geigy

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York TO594-61

PSYCHOSOMATICS

Official Journal of The Academy of Psychosomatic Medicine

EDITOR-IN-CHIEF

Wilfred Dorfman, M.D., Brooklyn, N. Y.

EDITORIAL BOARD

Associate Editors

ALLERGY—M. Murray Peshkin, M.D., *New York, New York*

G. P. EDUCATION IN PSYCHIATRY—William F. Sheeley, M.D., *Washington, D.C.*

INTERNAL MEDICINE—Burton L. Zohman, M.D., *Brooklyn, New York*

PSYCHIATRY—Klaus Berblinger, M.D., *San Francisco, California*

PSYCHOPHARMACOLOGY—Theodore Rothman, M.D., *Beverly Hills, California*

SURGERY, OBSTETRICS AND GYNECOLOGY—Robert N. Rutherford, M.D., *Seattle, Washington*

Contributing Editors

ALLERGY—Jerome Miller, M.D., *Philadelphia, Pa.*; Maury D. Sanger, M.D., *Brooklyn, N. Y.*

BIOCHEMISTRY—Milton Gross, Ph.D., *Jersey City, N. J.*

CHILD PSYCHIATRY AND PEDIATRICS—Adam J. Krakowski, M.D., *Plattsburg, N. Y.*; Samuel Silber, M.D., *Brooklyn, N. Y.*

DERMATOLOGY—Samuel I. Greenberg, M.D., *Brooklyn, N. Y.*

ENDOCRINOLOGY AND THERAPEUTICS—Herbert S. Kupperman, M.D., *New York, N. Y.*; William H. Perloff, M.D., *Philadelphia, Pa.*

G.P. EDUCATION IN PSYCHIATRY—Matthew Brody, M.D., *Brooklyn, N. Y.*; Milton H. Cohen, M.D., *Lewiston, Pa.*; Joseph J. Friedman, M.D., *Brooklyn, N. Y.*; F. V. Geiss, M.D., *Cleveland, Ohio*; Howard Klopff, M.D., *Milwaukee, Wisc.*; Bertram B. Moss, M.D., *Chicago, Ill.*; Harry Perlowitz, M.D., *Brooklyn, N. Y.*; Phineas J. Sparer, M.D., *Memphis, Tenn.*

HYPNOSIS—Lester S. Blumenthal, M.D., *Washington, D.C.*; Milton V. Kline, Ed.D., *New York, N. Y.*; William S. Kroger, M.D., *Beverly Hills, Calif.*; Bernard B. Raginsky, M.D., *Montreal, Canada.*

INDUSTRIAL MEDICINE—Luther A. Cloud, M.D., *New York, N. Y.*

INTERNAL MEDICINE—Walter L. Evans, M.D., *New York, N. Y.*; Charles Herbert, M.D., *San Francisco, Calif.*; Sanford M. Lewis, M.D., *Newark, N. J.*; Leonard L. Lovshin, M.D., *Cleveland, Ohio*; Samuel L. Swiller, M.D., *Brooklyn, N. Y.*

OBSTETRICS AND GYNECOLOGY—Frederick W. Goodrich, Jr., M.D., *New London, Conn.*; Kenneth W. Teich, M.D., *Duluth, Minn.*; Fritz Wengraf, M.D., *New York, N. Y.*; Leo Wollman, M.D., *Brooklyn, N. Y.*

OPHTHALMOLOGY—Theodore F. Schlaegel, Jr., M.D., *Indianapolis, Ind.*

PSYCHIATRY—Albert C. Deutsch, M.D., *Brooklyn, N. Y.*; Bernard I. Kahn, M.D., *San Francisco, Calif.*; James L. McCartney, M.D., *Garden City, N. Y.*; Harry Phillips, M.D., *East St. Louis, Ill.*; Edward Podolsky, M.D., *Brooklyn, N. Y.*; Jordan M. Scher, M.D., *Chicago, Ill.*; Melitta Schmideberg, M.D., *New York, N. Y.*; Victor Szyrinski, M.D., *Bismarck, N.D.*; George J. Train, M.D., *Brooklyn, N. Y.*

PSYCHOLOGY—Hans Hahn, Ph.D., *Lexington, Ky.*; Benjamin Kotkov, Ph.D., *Brattleboro, Vt.*; Elizabeth Thoma, Ph.D., *Rockville Center, N. Y.*

PSYCHOPHARMACOLOGY—Frank J. Ayd, Jr., M.D., *Baltimore, Md.*; Edwin Dunlop, M.D., *Attleboro, Mass.*; Alexander C. Traill, M.D., *Denver, Colo.*; Laurence B. Weiss, M.D., *Philadelphia, Pa.*

PSYCHOSOMATIC ASPECTS OF DENTISTRY—Melvin Land, D.D.S., *Dallas, Tex.*

SURGERY AND SURGICAL SPECIALTIES—Louis J. Feit, M.D., *New York, N. Y.*; Bernard J. Ficarra, M.D., *Oyster Bay, N. Y.*; George Seaman, M.D., *Brooklyn, N. Y.*

Advisory Editors

BASIC SCIENCES—Bernard Brodie, Ph.D., *Bethesda, Md.*

G.P. EDUCATION IN PSYCHIATRY—Robert S. Garber, M.D., *Belle Mead, N. J.*

INTERNAL MEDICINE—Yujiro Ikemi, M.D., *Fukuoka City, Japan*; Max Michael, Jr., M.D., *Jacksonville, Fla.*; Milton Plotz, M.D., *Brooklyn, N. Y.*

MEDICAL WRITING—Morris Fishbein, M.D., *Chicago, Ill.*; Richard H. Orr, M.D., *New York, N. Y.*; Harold Swanberg, M.D., *Quincy, Ill.*

OBSTETRICS AND GYNECOLOGY—M. Edward Davis, M.D., *Chicago, Ill.*; J. P. Greenhill, M.D.,

Chicago, Ill.; Goodrich C. Schauffler, M.D., *Portland, Ore.*

PEDIATRICS AND CHILD PSYCHOLOGY—L. W. Sontag, M.D., *Yellow Springs, Ohio.*

PHARMACOLOGY—Carl C. Pfeiffer, M.D., *Atlanta, Ga.*

PSYCHIATRY—Franklin G. Ebaugh, M.D., *Denver, Colo.*; Mauricio Knobel, M.D., *Buenos Aires, Argentina*; Stanley Lesse, M.D., *New York, N. Y.*; Nolan D. C. Lewis, M.D., *Princeton, N. J.*; Jules Masserman, M.D., *Chicago, Ill.*

PSYCHIATRY AND PSYCHOPHARMACOLOGY—Paul H. Hoch, M.D., *Albany, N. Y.*; William Sargant, M.D., *London, England.*

Publication Manager—STANLEY KAISH, M.B.A., *New York, N. Y.*

OFFICERS OF THE ACADEMY

PRESIDENT—George F. Sutherland, M.D., *Baltimore, Md.*

PRESIDENT-ELECT—Maury D. Sanger, M.D., *Brooklyn, N. Y.*

VICE-PRESIDENT—Robert N. Rutherford, M.D., *Seattle, Wash.*

TREASURER—M. Murray Peshkin, M.D., *New York, N. Y.*

SECRETARY—Bertram B. Moss, M.D., *Chicago, Ill.*

HISTORIAN—Burton L. Zohman, M.D., *Brooklyn, N. Y.*

IMMEDIATE PAST-PRES.—Wilfred Dorfman, M.D., *Brooklyn, N. Y.*

In addition to the above the Executive Council includes the following:

I. Phillips Frohman, M.D., *Washington, D.C.*
Harry Goldmann, M.D., *Baltimore, Md.*
Frederick W. Goodrich, Jr., M.D., *New London, Conn.*
Max Koenigsberg, M.D., *Charleston, W. Va.*

James L. McCartney, M.D., *Garden City, N. Y.*
Theodore Rothman, M.D., *Beverly Hills, Calif.*
Mortimer D. Sackler, M.D., *New York, N. Y.*
Victor Szyrinski, M.D., *Bismarck, N.D.*
Kenneth W. Teich, M.D., *Duluth, Minn.*

Published by

THE ACADEMY OF PSYCHOSOMATIC MEDICINE

PHYSICIANS POSTGRADUATE PRESS

277 Broadway - New York 7, New York

INFORMATION FOR CONTRIBUTORS

While *Psychosomatics* is the official journal of the Academy of Psychosomatic Medicine, its pages are open to all authors interested in the concept of total medicine. Original papers, book reviews, abstracts, letters: all will be considered by the editors for publication. Criteria for publication are scientific merit, interest, timeliness, and pertinence to the role of psychiatry in the daily practice of medicine.

Manuscripts

The original manuscripts of papers read at the annual meetings of the Academy should be left in the Press Room during the meetings, or sent to the Editor promptly afterward. Do not deposit carbon copies.

Papers read at the annual meetings become the property of the Academy. Not all papers read, however, can be published, and authors wishing to publish in other vehicles will first secure from the Editor the release of their manuscripts.

Papers will not be accepted for publication if they have been already published.

Papers contributed during the year (not on the annual program) should be sent to the Editor.

Style

Manuscripts should be typewritten, double spaced, on one side of the paper. They must be prepared in conformity with the general style of *Psychosomatics*. Retain a carbon copy of manuscript and duplicates of tables, figures, etc., for use should the originals be lost in the mails.

Illustrations

Authors will be asked to meet printer's costs of reproducing excessive illustrative material. Copy for illustrations cannot be accepted unless properly prepared for reproductions. Wherever possible, drawings and charts should be made with India ink for photographic reproduction as zinc etchings. Photographs for halftone reproduction should be glossy prints. Illustrations should be as small as possible without sacrificing important detail.

Authors' Corrections in Proofs

Corrections, additions or deletions made by authors are to be charged to them. Proper editing of original manuscript is important to avoid the expense of correction.

Tables

Tables should be typed on separate sheets. Tables are much more expensive to set than text material and should be used only where necessary to clarify important points. Authors will be asked to defray cost of excessive tabular material.

References

References should be assembled according to author in a terminal bibliography, referred to in text by numbers in parentheses. Bibliographical material should be typed in accordance with the following style for journals and books respectively:

1. Rosen, H.: *Am. J. Psychiat.*, 107:917, June 1957.
 2. Gesell, A., and Ilg, F. L.: *The Child from Five to Ten*. New York: Harper & Bros., 1946.
- Abbreviations should conform to the style used in the Quarterly Cumulative Index Medicus.

* * *

Psychosomatics, the official organ of The Academy of Psychosomatic Medicine, was founded in 1960. It is published bi-monthly, the volumes beginning with the January-February number.

Articles appearing in this Journal do not necessarily reflect the official attitude of the Academy or of the Editorial Board.

The subscription rates are \$10.00 to the volume; foreign subscriptions, \$11.50, including postage. Copyright 1960 by the Academy of Psychosomatic Medicine.

Business communications, remittances and subscriptions should be addressed to Psychosomatics, 277 Broadway, New York 7, N. Y.

Editorial communications, manuscripts, books for review, and exchanges should be addressed to the Editor, Wilfred Dorfman, M.D., 1921 Newkirk Avenue, Brooklyn 26, N. Y.

outwardly
anxious—
inwardly
depressed...

Nardil
relieves the
anxiety by
resolving
the hidden
depression

Symptoms of Depression: Anxiety, tension, fatigue, and somatic complaints—common symptoms of an underlying depression—are frequently observed in everyday office patients. **Therapy:** A prescription for economical Nardil, unlike some tranquilizers which may deepen or mask depression, will relieve the anxiety and tension symptoms by resolving the underlying depression in 4 out of 5 patients. **Starting Rx:** Because Nardil's maximum therapeutic benefits are usually attained with-

in two to six weeks, a starting Rx for 50 tablets—about 2½ weeks' therapy—is recommended.

Nardil's Safety Record: The excellent safety record of Nardil has been established by extensive clinical use, as reported in over 100 scientific studies and confirmed by a minimal incidence of toxicity in more than several hundred thousand patients to date.

Full dosage information, available on request, should be consulted before initiating therapy.

A TRUE ANTIDEPRESSANT
EFFECTIVE IN
4 OUT OF 5 PATIENTS

Nardil®



Editorial

The Academy of Psychosomatic Medicine Past, Present and Future

The Academy held its first meeting in 1954. Generalists, educators, specialists in all areas of medicine and psychiatrists of various persuasions found that the Academy did meet a most basic need for the physician to remain as a "total" physician. Despite the good intentions of the various specialty boards, patients had been divided, sub-divided and partitioned to enable each to stake its claim. The Academy, conscious of the need for specialization in an era of rapidly expanding medical knowledge, remained aware of the most obvious fact that body and mind were usually fairly well attached; that they were often so interwoven and intertwined that they defied the specialties, both individually and collectively. Although the goals of the Academy have been to constantly strive for the integration and desegregation of medicine and psychiatry, there has been a constant attempt to point up the natural limitations to this "togetherness."

It is not sufficient to orient and educate the non-psychiatrist so that he can better handle some of the emotional problems of his patients; he must also know when he

is beyond his depth. He must therefore learn that a two day course in hypnosis has its limitations; that psychodynamics cannot be learned by merely attending one or more annual meetings of the Academy, and that psychopharmacology with all of its potentialities, similarly has many pitfalls.

In the seven years of its existence, the Academy has grown both in numbers as well as in maturity. Its pioneer efforts have finally been recognized by leading psychiatric educators. Post-graduate courses for the non-psychiatrist are now given by many medical schools and psychiatric groups. In 1954, post-graduate education of this type was not only unavailable, but considered to be fairly dangerous.

The Academy's plans for the future require an expansion in membership. Only then can we hope to reach our full potentialities. Those of you who have received a complimentary copy of the Journal and find that *Psychosomatics* meets your needs should turn to page 59 and fill out the appropriate coupon. Please note that membership in the Academy includes a subscription to the Journal.

W. D.

PSYCHOSOMATICS

VOLUME II - NUMBER 1

JANUARY - FEBRUARY 1961

Contents

DRUGS AND PSYCHOTHERAPY—ARE THEY COMPATIBLE?	9
<i>Wilfred Dorfman, M.D.</i>	
THE ADVANTAGES AND LIMITATIONS OF COMBINED THERAPY	11
<i>Mortimer Ostow, M.D.</i>	
THE PRESENT STATE OF OUT-PATIENT TREATMENT OF DEPRESSIVE STATES	16
<i>Paul Kielholz, M.D.</i>	
PSYCHONEUROSES AS A WORLD PROBLEM	23
<i>James L. McCartney, M.D.</i>	
ANOREXIA AND CENTRAL NERVOUS SYSTEM STIMULATION	28
<i>Theodore M. Feinblatt, M.D., and Edgar A. Ferguson, B.S.</i>	
DRUGS AND THE AUTONOMIC NERVOUS SYSTEM	30
<i>Karl Rickels, M.D.</i>	
CHEST PAIN OF CORONARY ORIGIN	34
<i>Burton L. Zohman, M.D.</i>	
THE "SOMATO-PSYCHIC" ASPECTS OF COSMETIC SURGERY	39
<i>Louis Joel Feit, M.D.</i>	
MASTERING LONG TERM ILLNESS	43
<i>Edward L. Bortz, M.D.</i>	
NOTES AND COMMENTS	45
VITAMINS: REALIZATIONS AND LIMITATIONS	47
<i>Sam Silber, M.D.</i>	
ABSTRACTED FROM THE MEDICAL PRESS	48
BOOK REVIEWS	55

Copyright 1960 by The Academy of Psychosomatic Medicine

*for incisive,
dependable
anti-anxiety action—*

Stelazine

**'Stelazine' can promptly
relieve anxiety—in hyperactive
patients, without causing drowsiness; in
withdrawn patients, without causing euphoria.**

Where anorexia and insomnia have been problems, 'Stelazine' usually produces a marked improvement in appetite and in sleep patterns. Vague somatic manifestations of anxiety disappear. Rapport improves too; patients are often more willing to accept psychotherapy.

Based on his experience with other agents, Winkelman¹ feels that the therapeutic effect of 'Stelazine' "approaches the classic definition of ataraxia, that is, a state of calmness without sedation and untroubled by excitation in either internal or external environment."

And remember—you can use 'Stelazine' successfully where other agents have failed.

1. Winkelman, N.W., Jr.: Some Thoughts Concerning Trifluoperazine and Its Place in Ataractic Therapy, in *Trifluoperazine: Further Clinical and Laboratory Studies*, Philadelphia, Lea & Febiger, 1959, pp. 78-81.

PSYCHOSOMATICS

Official Journal of The Academy of Psychosomatic Medicine

Drugs and Psychotherapy — Are They Compatible?

WILFRED DORFMAN, M.D.

Moderator

In opening this conference, I don't have to remind this audience that the impact of the recent era of psychopharmacology has produced, in some quarters at least, changes in psychiatric thinking and practice. Our goal this afternoon is not to emphasize these drugs alone, but to explore their potentialities in combination with psychotherapy—both in the hands of the psychiatrist as well as the non-psychiatrist.

Are these new drugs equally valuable in the minor emotional deviations as they are in the major ones? Or do they work much like Penicillin—wonderful for pneumonia, but questionable in the common cold? Which drugs are best for anxiety? In which type of patient? Where does one use meprobamate? When should one use the phenothiazines? How about some of the newer ones—such as Librium, Dornal, Permitil, Tindal—and others? What do they do? Are they merely substitutes for phenobarbital, or are they the fore-runners of a biochemical approach to emotional illness? Which drugs are best for depression? Which for patients who manifest both anxiety and depression? Are there special types of depression that react best to the amine-oxidase inhibitors (Marsilid, Catron, Marplan, Nardil, Parnate, etc.?) Why? Do some react better to imipramine derivatives such as Tofranil and Elavil? Why? Where do Dexedrine, Dexamyl, Ritalin, Deprol, Deaner

and others fit in? Do reactive depressions respond as readily as the endogenous and involuntal types? When does one use ECT? Can one use ECT and drugs concomitantly? Is it only the drug that is required—or do we still need the doctor?

Do these drugs merely make the patient more accessible to the doctor, or do they have proven biochemical effects? Are these drugs always compatible with psychotherapy or do they sometimes remove motivation for therapy? If they are compatible, and I for one feel that they usually are, how can the principles of psychodynamics be made more intelligible to the non-psychiatrist? How can some of the supposedly mystical and romantic concepts of psychoanalysis be converted and processed so that some of this can become of value to the non-analyst, whether he is a psychiatrist or not? Or must they remain forever as a private religion?

Can the patient be made worse by drugs and psychotherapy, or by either modality alone, whether the treatment is in the hands of the generalist, the non-psychiatric specialist, the clinical psychiatrist or the psychoanalyst?

How about "masked or hidden" depression, or depressive equivalents, as seen in the patient with a legitimate and proven somatic disease, be it coronary insufficiency, peptic ulcer, arthritis, obesity, hypertension, diabetes mellitus, etc.? In some of these definitive and definitely diagnosed organic situations, the depression is not masked but definitely out in the open, and is then usually related in its entirety to the somato-psychic effects of the particu-

*Presented at the Symposium on Drugs & Psychotherapy at the 7th Annual Meeting of the Academy of Psychosomatic Medicine, Philadelphia, Pa., Oct. 14, 1960.

lar disease. But here, as with the masked type, both the doctor and the patient too frequently become preoccupied with the need for constant and repetitive re-examination and re-evaluation of physiological, biological, hematological, dermatological, immunological and other logical problems—yet logic may be to no avail. The patient illogically and stubbornly remains ill despite the very latest remedies, and is not at all impressed by the fact that he is receiving one wonder drug after another. How often does a hidden depression lie behind this resistance to recovery or prolongation of convalescence? How can the

patient be helped if both he and the doctor are either unaware, or else consciously suppress their recognition of this emotional overlay? What are the cues and clues which should alert the physician to the presence of the possibility of an underlying depression—and what should he do about it?

I hope that some of these questions will help stimulate both the panelists as well as the audience. All those that remain unanswered, for whatever reason, may perhaps be answered at our June meeting in New York or our October meeting in Baltimore.

Coming Academy Meetings

Regional Meeting at Barbizon Plaza to Coincide with A.M.A. Meeting in New York City

Plans are being formulated for a one day Academy meeting in New York City on Sunday, June 25, 1961. Since this is the day prior to the meeting of the American Medical Association, it should attract many members of the Academy as well as non-members. The program will be entitled "A Symposium on Anxiety and Depression." There will be papers covering neuropsychological, biochemical, psychodynamic and clinical correla-

tions; there will also be papers on current research in drugs. Panel discussions will permit question and answer periods. Subsequent issues of the Journal will furnish more detailed information as to speakers and titles of the papers. It would be helpful, in order to aid the planning, if those who plan to attend will fill out the coupon on page 59. There will be no registration fee.

Annual Academy Meetings

Looking further ahead, plans are being made by program chairman George Sutherland, M.D. (3700 N. Charles St., Baltimore, Md.), for the 1961 Annual Meeting to be held in Baltimore. The dates are October 12th through the 14th. This meeting will be at the Emerson Hotel.

The 1962 Annual meeting will be at the Radisson Hotel, in Minneapolis, Minnesota from Octo-

ber 24-28. The program chairman, Kenneth W. Teich, M.D. (801 Medical Arts Building, Duluth 2, Minn.), will welcome any suggestions.

In 1963, the Annual Meeting will be at the Sheraton-Palace Hotel in San Francisco, California. The dates are October 17 to 20. The Chairman is Robert Rutherford, M.D., 707 Broadway, Seattle 22, Washington.

The Advantages and Limitations of Combined Therapy

MORTIMER OSTOW, M.D.

"Only too often one seems to see that the therapeutic process is merely lacking in the necessary motive force to enable it to bring about the alteration," wrote Freud in 1933 (*New Introductory Lectures*). "Some specific tendency, some particular instinctual component is too strong in comparison with the counter-forces that we can mobilize against it. This is quite generally so in the case of the psychoses. We understand them in so far as we know quite well where we ought to apply the levers, but they are not able to lift the weight. In this connection we may hope that in the future our knowledge of the action of hormones . . . will provide us with a means of coping successfully with the quantitative factors involved in these diseases; but today we are far from having reached that desirable goal." We have here a definitive and unequivocal response to the query, "Are drug therapy and psychotherapy compatible?" We also have a precise statement of the relation between the two in clinical application and a theoretical account of the action of drugs in the therapeutic process.

Freud described accurately the limitations of psychoanalysis and deplored particularly its inefficacy in the treatment of psychoses, due not to failure of understanding of the pathogenic process, but to the profound alterations in the amount and distribution of energies within the psychic apparatus which block its repair by psychologic means. He anticipated ultimate circumvention of this limitation by direct assault via chemical agents upon the massive array of energies which render the patient inaccessible to therapy. However Freud found no such access in his lifetime, either through the agency of hormones or any other physical means. In

the intervening years the organic therapies that have gained currency from time to time have at best been efficacious in dispelling individual psychotic episodes, but have failed to affect ongoing personality dysfunction in which these are rooted and from which similar crises invariably erupt once more. Procedures such as psychosurgery have rendered an intractable psychotic more docile, but often at the cost of irreparable damage, so that their legitimacy from an ethical standpoint may be seriously questioned.

Before proceeding to discuss psychotherapy and drug therapy, let me state clearly what each of these terms will denote in this discussion. I shall use the term psychotherapy to refer only to the technic for alleviating mental illness by uncovering the instinctual forces, their derivatives and the defenses against them, which combine to form symptoms. In its most elegant form this technic is identical with classical psychoanalysis. In its more dilute forms, it still aims to cure by making conscious the unconscious. It turns to actions, symptoms, dreams, fantasies, errors, and associations as its source material. It takes cognizance of the transference and exploits it both as a means of motivating the patient to work hard in the treatment process, and as a source of information. The fact that in periods of especial distress or anguish, the therapist may depart from his neutral role to offer relief by comfort, reassurance and encouragement, is not to be misunderstood as an indication that this procedure is a definitive mode of therapy. When such morale influencing intervention is called for, its purpose is only to assist the patient to recover sufficient ego control to proceed with insight therapy. The administration of drugs during the course of the less structured psychotherapies is governed less by

Presented at the Seventh Annual Meeting of the Academy of Psychosomatic Medicine in Philadelphia, Pa., October, 1960.

formal theoretical requirements than by expediency.

I shall use the term drug therapy in this discussion to refer only to the administration of the recently discovered chemical substances that exert powerful influences on modes of psychic function. Here I believe it is important to make clear distinction between those agents, old or new, which stimulate or obtund ego function directly (such as amphetamine or meprobamate) and those whose action is upon the production, distribution and dissipation of instinctual energies and their psychic derivatives, namely the true tranquilizers and the energizers. The former begin to act within minutes and the duration of their action is limited to hours. The latter may effect no visible change for days or weeks and their influence persists for a similar period of time. Perceptible improvement or deterioration of specific ego activities result from the former; the changes brought about by the latter are best comprehended by referring to the system of psychic energetics developed within psychoanalytic metapsychology. It is well known that the employment of stimulants or intoxicants of the former group may retard the psychotherapeutic process by offering the patient temporary relief and diminishing his interest in the treatment work. Their use should be restricted to those emergencies which threaten the life of the patient, situations of panic or excitement or severe depression. It is only the energizers and energy reducers, or tranquilizers, of the latter group which can be employed effectively in combination with psychotherapy to "cope successfully with the quantitative factors."

Let us consider first each of these two modalities, psychotherapy and pharmacotherapy, in their independent use. Structured psychotherapy, including psychoanalysis, combines insight therapy which is its chief and unique contribution, with simultaneous symptomatic therapy. The latter includes affectionate support via the

transference, reassurance, and often some education. Correcting misinformation and illusion is a vital prerequisite to confronting the patient with reality. However, it is the insight therapy alone which contributes to the permanent control of symptoms and which can correct the disturbed personal relations which give rise to the symptoms.

On the other hand, psychotherapy suffers various serious limitations. Some of these are practical and only incidental to the nature of the process itself, for example, the expense of the treatment, its cost in time, its duration and the relative dearth of well trained practitioners. Others are intrinsic to the psychotherapeutic process. First, some illnesses are impervious to it, for example the psychoses. Second, since the interpretations and reconstructions of psychotherapy merely act to remove inhibitions, so that natural reparative forces can come into play, its effectiveness will depend upon the resilience of the ego, and will be limited by its rigidity. These in turn are determined by constitutional factors, by the duration of the illness and the age of the patient. Third, psychotherapy cannot always prevent destructive "acting out" which may endanger the life of the patient and others, and which may circumvent the treatment procedure. Such acting out includes addictions, perversions, and repetitions of archaic patterns of instinct gratification. Fourth, some patients are successful in incorporating the treatment situation into the neurosis, so that they protract it indefinitely in order to cling to the gratification of the transference. Fifth, the duration and the expense of the treatment, and the personality changes it often brings about are prone to elicit resistance from the family and serious interference.

I should like to take into account in this discussion the implications of the several forms of treatment not only for the patient, but also for the therapist. The practice of psychotherapy alone makes it

necessary for the therapist to exclude certain whole categories of patients, leaves him in difficulties when confronted with psychotic breakdown occurring in the course of treatment, and in some instances, results in his seeing himself isolated from the mainstream of medicine.

Let us consider now drug therapy employed without psychotherapy. Some of its advantages are practical and incidental to its essential nature. These include its cheapness and wide availability, the simplicity of execution in some cases, the relative briefness of the course of therapy, and the small consumption of time during therapy. Other advantages are inherent in the nature of the procedure. It is effective in the most difficult group of patients, the psychotics, and it may control certain types of acting out, such as alcoholism and addiction.

But drug therapy also has some serious limitations. It is inapplicable, except under certain special circumstances, to patients with neurosis. It does not influence the difficulty in interpersonal relations which results from the pathogenic process, but which does not seem to signify disease so obviously as frank symptoms. It does not prevent subsequent attacks. In many cases it is difficult to apply. For example, in some forms of catatonia, in schizophrenic melancholia, in some depressions or suicidal moods, the proper selection, dosage, combination and sequence of drugs is often a complex and subtle problem. Overdosage may throw a schizophrenic into melancholia, a melancholic into mania or schizophrenia or neurosis. Toxic and side effects sometimes seriously complicate management. Another limitation of drug therapy is the latency, in some instances five weeks or more, between initiation of treatment and relief. This waiting period often constitutes a serious hazard in the case of suicidal and disturbed patients.

Pharmaceutical therapy alone exerts some adverse influences upon the physi-

cian. It may cause him to lose interest in the psychologic aspect of mental illness and to minimize the problems of the internal personality. It discourages him from viewing the patient within the context of the family relations. On the other hand, if the therapist attempts to refer to psychologic criteria for determining and regulating the administration of drugs, his interest in psychologic problems and therapy may be automatically encouraged.

The theoretical basis of combined therapy is the following: Psychotherapy addresses itself to the resolution of the fundamental pathogenic process. When on the other hand, disturbances in energy equilibrium are encountered which are too extreme to be resolved by psychotherapy, the psychiatrist may turn to chemotherapy. Some disturbances, including psychoses, addiction, and states of generalized inhibition, may have to be dealt with at the outset, or may develop as complications or relapses during treatment. I have in mind a specific technic for combining drug therapy with psychotherapy. The drug is administered at the beginning of treatment, or in relapse, in accordance with specific psychologic criteria for determining selection, dose, combination and sequence. The psychologic criteria relate to the estimation of the ego's libido supply for the pursuit of object relations and for the support of its own tonic functions. By examining such variables as attitude, mood, posture, interest in objects, amount and nature of self-observation, amount and nature of narcissism, prevalence of projection and introjection as modes of object relation and defense, relative susceptibility of the ego to influences of id and superego, it is possible to assess fairly consistently the ego's content of libidinal energy. From this it becomes possible to ascertain whether an energizing or a tranquilizing drug is indicated and when changes in dose and drug are needed. But the use of medication need not be restricted to relieving conditions which

have already developed. When a patient shows a tendency to relapse into states of schizophrenia or mania on the one hand, or melancholia or addiction on the other, relatively small doses of medication will suffice to provide a ceiling or a floor, respectively, which will contain the tendency to such broad excursions of libido supply, and hold the patient within the limits of the normal range of ambulatory behavior and within a reasonable working range for therapy. In situations in which alcoholism, and probably other addictions too, prevent treatment, these can be arrested by medication which may be continued until the psychotherapy has had a chance to alleviate the basic pathogenic process. Sometimes a crucial situation arises in the patient's life to which he is unable to respond because of crippling of ego function. On these unusual occasions, pharmacotherapy can be introduced as an emergency measure, to be used until after the crisis has passed. I have in mind critical business, professional and family situations. There are certain patients who cling to therapy for long periods of time not because they wish to be cured by the procedure, but because it provides them with the only erotic relation which they can depend upon and in which they will not be injured. Such patients generally operate at low libido levels and their clinging is an effort to prevent a catastrophic decline into melancholia. I believe that in such instances, the administration of an energizer can eliminate the danger of depletion, and by refilling the ego, it can mobilize the neurotic conflict which the patient has been unable to face.

Unless such contingencies occur, I firmly advise against the use of pharmaceutical agents. Drugs should not be used unless they are necessary for the protection of the patient's life or the protection of the treatment. Pharmacotherapy should not be substituted for good technic. The best drug will not serve when a vital interpretation is required. Of course the in-

troduction of this supplementary procedure is reflected in the transference which thereby acquires an anacletic quality. However, everything that happens in the transference can be prepared for and interpreted, and the additional analytic material that issues can only facilitate, not retard definitive psychotherapy. The employment of these pharmaceutical aids may reduce the frequency of treatment needed to see the patient through an emergency, but best results rather than minimal results are obtained by pursuing treatment as intensively as the patient's condition will permit. (For a fuller discussion of the criteria, rating scales and techniques I have in mind, the reader may consult my other publications on this subject.)

This combined procedure has several advantages for the patient. The spectrum of disorders amenable to effective and definitive therapy becomes considerably broadened, so that patients who would heretofore have had to have their lives interrupted by periodic, catastrophic, mental breakdowns, relieved in some instances by shattering treatments, and accompanied perhaps by shorter or longer hospitalization, can now live their lives without major breaks in continuity and out from under the sword of Damocles. Psychotherapy need not be disrupted by occasional relapses into psychosis. If critical situations arise, the patient can be helped to look after his affairs satisfactorily. The indolent ones in therapy can be activated. Patients can be helped with the control of alcoholism and certain addictions, in instances where such control is necessary for the progress of the treatment.

The therapist too profits from the availability of combined therapy. He becomes professionally interested in a wider spectrum of disorders. He acquires the opportunity to observe and study psychotic and other illnesses which generally escape him. He becomes interested in the study of energetics, in distinguishing it from

dynamics, and in observing their mutual interplay. He develops a greater interest in following the physiologic events of the patient's life, hormonal changes and psychosomatic alterations.

On the other hand, let us not overlook the limitations of this combination of treatments. The patient may use the drug cure to reinforce his resistance to psychotherapy. This has happened in some instances in which I have helped patients out of suicidal melancholia with an energizer. The narcissistic overconfidence and megalomania with which they emerged, together with a need to defend against the intensified homosexual drive, impelled them to leave therapy. Nevertheless I do not regret having used the drug in such situations for I should not have been able to justify to myself withholding an instrument that would prevent a possible suicide, merely in order to ensure better treatment if the patient survives. After a second or third relapse the patient may recognize the need for more definitive therapy. In some instances, having to resort to medication, or to rely on a maintenance dose, diminishes the patient's self-esteem and accentuates whatever hypochondriacal fears of mental deterioration may exist. A final serious limitation is that for most neurotic disorders in which energetic fluctuations do respond to dynamic changes, drug therapy has little to offer. The spontaneous deviations are so small and the equilibrium so fluid that even a small pharmacologic push easily causes an inordinate swing from which a second set of symptoms evolves and replaces the symptoms that have been relieved.

There are some hazards too from the point of view of the therapist. It is easy to become distracted from proper concern with dynamics and genetics by an interest in drug effects. This tendency must be

checked, for it can ruin the treatment for the patient, and it can ruin the therapist's technic. Moreover, the inexperienced therapist runs the risk of turning too readily to pharmacologic agents to overcome resistances which should be worked through psychotherapeutically.

In summary, drug therapy is most elegantly employed when it is used to bring and hold otherwise inaccessible patients in intensive psychotherapy. Psychotherapy can become more widely applicable to patients hitherto considered too sick or unstable to participate in it successfully. Psychiatrists who have been interested only in organic aspects of mental illness and treatment are now encouraged to attend to psychologic phenomena. Finally, psychotherapists are given an opportunity to study and treat conditions which until now have been inaccessible to them, and in order to employ the psychopharmacologic agents they will be encouraged to learn to recognize and manage fluctuations in psychic energy and the relations of these to shifts in psychodynamics.

5021 Iselin Ave., Riverdale, New York 71, N.Y.

BIBLIOGRAPHY

- Ostow, M., and Kline, N. S.: The Psychic Action of Reserpine and Chlorpromazine. In N. S. Kline (Ed.), *Psychopharmacology Frontiers*. Boston: Little, Brown, 1959.
- Ostow, M.: The Clinical Estimation of Ego Libido Content. Read before American Psychoanalytic Association, Midwinter meeting, Dec. 1959. *Internat. Jour. Psycho-Anal.*, in press.
- Ostow, M.: The Effects of the Newer Neuroleptic and Stimulating Drugs on Psychic Function. In G. Sarwer-Foner (Ed.), *The Dynamics of Psychiatric Drug Therapy*. Springfield, Ill.: C. C. Thomas, 1960 (a).
- Ostow, M.: The Use of Drugs to Overcome Technical Difficulties in Psychoanalysis. In G. Sarwer-Foner (Ed.), *The Dynamics of Psychiatric Drug Therapy*, Springfield, Ill.: C. C. Thomas, 1960 (b).
- Ostow, M.: The Psychic Function of Depression: A Study in Energetics. *Psychoanal. Quart.*, 29, 355-394, 1960 (c).

The Present State of Out-Patient Treatment of Depressive States

(With Special Emphasis on the Psychosomatic Aspects)

PAUL KIELHOLZ, M.D.

Depression is a syndrome which represents the psyche's reaction to a multitude of mental and physical trauma. It is characterized by its sad mood frequently associated with anxiety, inhibition of thought processes and psychomotor retardation. Depressive states are best classified according to their pathogenesis, although transitional forms are frequently encountered. They comprise:

1. Symptomatic depression
2. Secondary depression
3. Psychogenic depression
 - a) Reactive depression
 - b) "Exhaustion" depression and neurotic depression
4. Endogenous depression
5. Involutional depression

The choice of treatment is determined neither by the pathogenesis nor the intensity of the depression, but by the *danger of suicide*.

PROPHYLAXIS OF SUICIDE

As complete surveillance is not possible in the hospital, a good physician-patient relationship is the best means of preventing suicide. It must be borne in mind that the risk of suicide is increased where there is a history of suicide in the family, or previous attempts at suicide on the part of the patient; where the patient lacks religious faith or is lonely and without roots; and especially in depressions associated with anxiety in elderly persons.

The *diagnosis* of depressive states is *always made by elimination*, as there are no pathognomonic symptoms for the differ-

ent forms of depression. In the first instance a thorough physical and neurological examination should exclude symptomatic depression.

I. Symptomatic Depression

Depressive-aphathetic breakdowns are frequently observed during convalescence after influenza, tonsillitis, pneumonia, thrombophlebitis and hepatitis, if work is resumed too soon, and especially if the infection has been curtailed with antibiotics. Severe cardiac, renal, vascular and blood diseases with asphyxia of the tissues may also lead to states of anxiety and depression. In local and diffuse brain lesions and in endocrine disturbances, sullenness and increased irritability are often encountered. Moreover it should be borne in mind that Rauwolfia derivatives may elicit depressive states in predisposed patients.

II. Secondary Depressions

It should also be borne in mind that depressive conditions may accompany psychoses. Defiant-depressive moods are common in *epilepsy* and *oligophrenia*. Apathetic-autistic depression with blunting of affect, blocking, dissociation and hallucination are characteristic of *schizophrenic* and *preschizophrenic* processes. These symptomatic and secondary depressions must be excluded by physical examination and by a thorough study of the case-history and psychodynamic mechanisms before proceeding to the *differential diagnosis of true depressions*.

III. Psychogenic Depression

a) *Reactive Depression*: According to Bumke, Staehelin and Binder, reactive de-

Presented at the Seventh Annual Meeting of the Academy of Psychosomatic Medicine in Philadelphia, Pa., October, 1960.

From the Psychiatric Clinic, University of Basle, Basle, Switzerland.

pression is a feeling of despondency and dysphoria, which is the immediate response to a painful mental trauma. It is of relatively short duration, and the contents of thought are as a rule centered upon the precipitating emotional experience. The intensity or duration, or both of these, are out of proportion to the traumatic event. The depression is thus an easily comprehensible response to an offence, mortification, emotional trauma, or loss or renunciation which the patient cannot overcome.

In old age, and in difficult environmental circumstances, protracted, insidious, *stuporous-inhibited* forms are more common, whereas in young persons, short-lasting, *defiant-aggressive* reactions predominate. The duration of reactive depressions increase with advancing age. In male patients above 50 years of age the course is especially protracted.

b) *Exhaustive Depression and Neurotic Depression*: Exhaustion depression is an abnormal emotional development due to chronic or recurrent psychological conflicts, occurring in introverted, affectively pent-up, asthenic personalities. Conscious environmental stimuli lead to exhaustion-depression; repressed, unconscious conflicts, emotions and drives give rise to neurotic depressions. Thus these two forms of depression differ only as regards the pathogenetic mechanism.

The depressive picture may be obscured by a wide variety of physical disturbances, and is thus easily overlooked by the primarily somatically trained physician. Psychopathologically, three stages can as a rule be discerned. Corresponding to the symptomatology, these are classified as follows:

1. Hyperaesthetic-asthenic prodromal stage
2. Psychosomatic stage
3. Depressive stage

The *prodromal stage* is characterized by hypersensitivity and irritability, excessive fatigability, inability to concentrate and difficulties in falling asleep. Insomnia, in

addition to intensifying fatigability and irritability, leads to a true decrease in efficiency and a consequent negative attitude. After several years this stage of irritability and weariness usually leads to a second:

In the *psychosomatic* stage a broad variety of autonomic concomitants or sequelae are manifested. These psychosomatic disturbances lead to excessive self-observation and to a multitude of hypochondriacal complaints and an anxious-depressive negative attitude. The third:

The *depressive stage* may be unexpectedly precipitated by slight additional mental trauma. It is usually characterized by a despondent-apathetic mood, restriction of the thought processes, feeling of emptiness, retardation of the psychomotor functions, drive and vitality, and frequently accompanied by hypersensitivity to noise and by hyperalgesia.

IV. Endogenous Depression (Melancholia)

Endogenous depressions are recurrent attacks of melancholia occurring within the cycle of manic-depressive psychosis. Attacks may be observed once or periodically, or may alternate with manic phases. According to present conceptions, constitutional factors are the chief etiological agent.

Cyclothymia in the family, pyknic constitution, cycloid temperament, unmotivated changes in mood lasting for hours or days, absence of pathogenic factors, diurnal fluctuations independent of the environment, unexpected lowering of the mood or sudden brightening speak in favor of endogenous processes.

Further characteristics are the basic depression, which can only be transitorily relieved, depressive delusional ideas, and especially primarily somatic symptoms such as decreased turgor of the skin, decrease in the secretion of tears, halitosis, dryness of mouth, superficial respiration and constipation. Endogenous depressions frequently show lack of drive and initia-

tive and reduced power of resistance, resulting in a feeling of inner emptiness and an inability to make decisions and to act, i.e. a reduction in the vitality (*Weitbrecht*).

V. Involutional Depression

Involutional depressions are depressive states in the climacteric, in which neither evidence of cyclothymia in the family nor previous manic-depressive phases are traceable.

In most patients certain predisposing prepsychotic traits are present. Among these are inflexibility, inadaptability, over-conscientiousness, scrupulousness, perfectionism and lack of affective outlet. Involutional depressions are usually preceded by a prodromal stage of years' duration, characterized by increased emotional irritability and preoccupation with security.

More than 90% of all involutional depressions are associated with anxiety and suicidal ideas, and are therefore not suitable for out-patient treatment. Corresponding to the pre-psychotic personality, the depressive symptoms are characterized by their inflexibility, and tend to take a protracted course.

PSYCHOSOMATIC ASPECTS OF DEPRESSIVE STATES

According to *M. Bleuler*, psychosomatic diseases are physical disorders accompanying or following mental, and especially emotional processes. As far back as 1925, *W. R. Hess* pointed out that emotional and autonomic mechanisms were more closely interrelated than is usually accepted.

The somatic reactions to acute mental trauma and the symptoms accompanying or following chronic affective tension may be studied in psychoreactive and exhaustion depression. In reactive depression the mental traumata are often threatening to the patient's livelihood and therefore elicit reactions with depression and anxiety. Anxiety causes dysfunction of the sym-

thetico-adrenergic system, manifested in the form of mydriasis, perspiration, fine tremor, dryness of mouth, tachycardia, hypertension, hyperglycaemia, anorexia and diarrhea.

The somatic manifestations accompanying acute emotional conflicts have little clinical significance; they form, however, the basis for understanding psychosomatic disorders. Thus chronic or repeated emotional stimuli gradually lead to permanent physical symptoms. Judging from our observations these disorders are not dependent on the nature of the psychogenic trauma, but rather on the constitution and the psychological and somatic disposition. Chronic psychological "stress" may be manifested in two different ways: in sensitive, over-conscientious, pent-up personalities it leads to a failure of the autonomic nervous system, which is evidenced in form of exhaustion depression. By means of autonomic function tests we were able to prove that the decompensation of sympathetic hypertension is manifested in the psychological sphere in the form of an apathetic-depressive state. In active, aggressive, extroverted persons, who are better able to withstand disagreeable environmental stimuli, the chronic sympathetic dysfunctions of patients weakened by predisposition are manifested in the form of true *somatic disorders*.

According to our investigations, the *most frequent cause* of psychosomatic disorders is not so much quantitative overwork as the disagreeable environmental circumstances under which this work has to be carried out.

TREATMENT OF DEPRESSIVE STATES

The following guiding principles should be observed:

1. Determination of the multifactorial pathogenesis (*Hoff*), as far as this is possible.
2. Psychotherapeutic treatment.
3. Psychotropic drug treatment.

Psychotherapy is determined by the etiology of depression. Therefore a prereq-

quisite is the most thorough differential diagnosis that is possible, and the determination of the psychodynamic mechanisms of the depressive symptoms. In *reactive depressions* psychotherapy predominates. After gaining objective insight into the causative agents and establishing the environmental circumstances, the aim is intellectual and emotional analysis and neutralization of the conflicts in repeated, confidential talks. In "*exhaustion*" *depression* the working and environmental conditions must be assessed in order to find possibilities for relaxation and for compensating the emotional stress. Needless to say, psychotherapy is of primary importance in *depressive neuroses*. In these cases psychoanalysis is frequently indicated. In *melancholia* and *involutional depression* the setting up of an exact daily program often relieves the tormenting inability to make decisions. Sympathetic encouragement and repeated assurance that the depression is sure to subside is especially valued by the patients. Attempts to distract or cheer up the patient, especially active incitement, may often elicit anxiety, and should therefore be avoided. *Psychotherapy* should also be aimed at consolidating and securing the patient's *future*. By forming new interpersonal relationships, by developing and increasing his interests and by establishing higher values, the patient should learn to resolve and overcome subsequent phases of depression by his own efforts.

Out-Patient Treatment of Depressive States with Psychotropic Drugs

The prerequisites for hospital and out-patient treatment are different. In the *hospital*, primary sedation, relaxation and a hypnotic effect are welcome even during the day-time.

The contrary is true for *out-patient treatment*. Excessive sedation is not desirable since it prevents the patient from continuing his work. If disagreeable side-effects are experienced, the patients not

only lose confidence in the drug, but simply discontinue taking it.

For out-patient therapy with psychotropic drugs the following principles should therefore be observed: 1) Low dosage; 2) Individual dosage; 3) Adaptation of the dosage to the course of the disorder; 4) Negligible depressant action and absence of side-effects.

Neuroleptic agents and *tranquilizers* bring about a varying degree of sedation. As additional treatment they may be indicated for relieving anxiety states. These drugs have, however, no effect on the basic mood.

Amphetamines and *similar substances* lead to an increase in drive and a reduction in tiredness. Since they heighten inner excitation and are liable to elicit acute attacks of anxiety with increased tendency to suicide, and since they have no influence on the basic mood, amphetamines are contraindicated in depressive states.

The *monoamine oxidase inhibitors* elevate the mood and lead to a slight increase in drive through improving the appetite. When given over a prolonged period in effective dosage they may occasionally elicit persistent circulatory insufficiency, necessitating withdrawal of treatment.

An *iminobidenzyl derivative*, Tofranil, has proved the most effective in the out-patient treatment of depressive states; it incurs no dangerous side-effects and its sedative action is negligible.

Out-patient treatment of depression with drugs varies according to whether *inhibition* or *anxiety and agitation* predominate. Patients of leptosome constitution, with autonomic dysfunction, are particularly sensitive to antidepressant substances. Even under low initial dosage side-effects may be observed. The adaptation of the dosage therefore requires particular attention in these cases. In melancholic patients with a pyknic constitution, treatment may be initiated with high doses.

In depressive conditions associated with pronounced anxiety and agitation, treat-

ment with thymoleptics must be combined with drugs relieving anxiety. If anxiety relieving neuroleptics or tranquilizers are used alone, general sedation and relaxation are achieved, but the basic mood is not changed. With antidepressants alone the despondent mood may be elevated, but anxiety and inner unrest are often intensified.

Similar combined treatment is also indicated in psychosomatic disorders, since the basic mood of these patients with autonomic dysfunction is usually associated with anxiety.

Among the anxiety-relieving drugs, Nozinan (Lévomépromazine) Librium (methaminodiazepoxide) in small doses, Taractan (chlorprothixene) and Mellaril (thioridazine) have proved particularly effective.

In symptomatic and secondary depres-

sion, the underlying disease is often not recognized, and thymoleptic therapy is initiated. Especially in schizophrenia, the psychopathological symptoms are frequently weakened or obscured by the depressive state, and become more pronounced in the course of antidepressant treatment, with an aggravation of the clinical picture. In symptomatic and secondary depression, treatment is determined by the basic disorder. Antidepressants are only indicated as additional treatment where the basic mood is excessively lowered.

Depressive states are often mistakenly treated with neuroleptics and tranquilizers. In inhibited forms of depression these drugs are contra-indicated as they enhance the depression through an additional reduction of the patient's energy. With neuroleptics only relief in anxiety, relaxation

TABLE I
Out-Patient Treatment of Inhibited Forms of Depression

Time	Drug	Day						
		1-3	4	5	6-7	8	9	10
Morning	Tofranil (mg.)	10	25	25	25	50	50	50
Midday	Tofranil (mg.)	10	10	25	25	25	50	50
5 P.M.	Tofranil (mg.)	10	10	10	25	25	25	50
On Retiring	Nozinan (tbl.)	1/2	1/2	1/2	1/2	1/2	1/2	1/2
	sedatives if necessary	↑	↑			↑		↑
	Consultations	I	II			III		IV

TABLE II
Out-Patient Treatment of Depression Associated with Anxiety and Agitation and of Psychosomatic Disorders

Time	Drug	Day						
		1-3	4	5	6-7	8	9	10
Morning	Tofranil (mg.)	10	20	20	20	30	30	30
	Nozinan (tbl.)*	1/4	1/4	1/4	1/4	1/4	1/4	1/4
Midday	Tofranil (mg.)	10	10	20	20	20	30	30
	Nozinan (tbl.)*	1/4	1/4	1/4	1/4	1/4	1/4	1/4
5 P.M.	Tofranil (mg.)	10	10	10	20	20	20	30
	Nozinan (tbl.)*	1/4	1/4	1/4	1/4	1/4	1/4	1/4
On Retiring	Nozinan (tbl.)*	1/2	1/2	1/2	1/2	1/2	1/2	1/2
	sedatives if necessary	↑	↑			↑		↑
	Consultations	I	II			III		IV

*In the place of Nozinan Librium (10 mg.), Taractan (15 mg.) or Mellaril (10 mg.) may be given as an anxiety-relieving therapy.

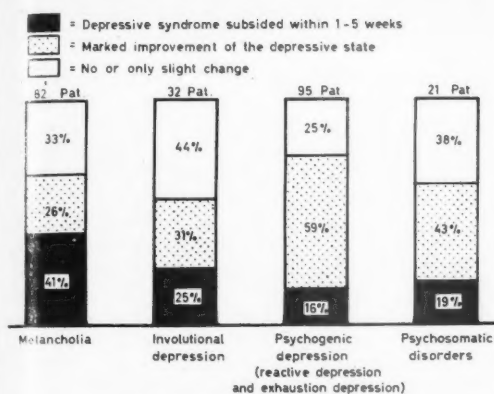


Fig. 1. The Results of Out-Patient Therapy of Depressive States and Psychosomatic Disorders.

and sedation can be achieved; since tranquilizers or neuroleptics have no effect on the basic mood they should never be used alone in the treatment of *depression with anxiety features*.

By comparing the different phases of *endogenous depression* it could be established that the depressive attack was more rapidly relieved or overcome under drug treatment than when left to subside spontaneously. The thymoleptic effect of the drugs can be impressively demonstrated by changing over to placebos.

In *involutional depressions*, although marked improvement may be achieved, complete disappearance of the depressive symptoms is rarely observed.

The results of treatment of *psychogenic depression* are extremely difficult to assess since depressive reactions tend to regress spontaneously. Comparative investigations with other patients are of no value since the duration and depth of these psychological disturbances are dependent on the character, the age, the environmental conditions and the motivating experience.

Among the psychosomatic illnesses in which emotional stress is the chief causative agent, gastric and duodenal ulcer, essential hypertension and coronary spasms respond best to treatment. In ulcerative colitis, diabetes mellitus and asthma only

a certain degree of improvement is achieved. In diabetes mellitus a reduction in the insulin-dosages is often possible.

SUMMARY

Depression is a syndrome which represents a reaction to a multitude of harmful mental and physical influences. Presence or absence of the danger of suicide is to be taken as the criterion for deciding whether or not treatment should be done in the hospital. It is absolutely necessary for the success of therapy that as accurate a diagnosis as possible should be made on an etiological basis. The possibilities of differential diagnosis of the basic forms of depression are briefly described. By means of the secondary somatic symptoms and sequelae of the depressive states it has been shown that protracted emotional tension can lead not only to depressive manifestations but also, where the patient has the appropriate organic predisposition, to actual psychosomatic diseases.

Psychotherapeutic procedures and psychotropic drug treatment in the various forms of depressive states are described. In out-patient therapy, unlike treatment in hospital, only those drugs are indicated which have few side-effects and negligible depressant effect on the nervous system.

The inhibited depressive states respond best to the iminodibenzyl derivative, Tofranil, whereas in depressions with features of anxiety and agitation good results can be obtained only with a combination of antidepressants and tranquilizers. Brief reference is made to the most frequent reasons for the failure of treatment of depressions. The observation that protracted emotional stimuli may be manifested on the one hand in "exhaustion" repression, and on the other hand in psychosomatic disorders, indicates that the somatic sequelae should be treated concomitantly with the depressive states.

The results of treatment are compared and briefly discussed.

REFERENCES

- Battegay, R.: Häufigkeit, Differentialdiagnostik und Therapie milder Depressionen. *Deutsche med. Wochenschrift*, 85:217, 1960.
- Binder, H.: Die psychopathischen Dauerzustände und die abnormen seelischen Reaktionen und Entwicklungen. *Psychiatrie der Gegenwart*, Bd. II: *Klinische Psychiatrie*, S. 180, Springer-Verlag, 1960.
- Bleuler, M.: Probleme der Psychosomatik. Klinischer Geltungsbereich. *Schweiz. med. Wochenschrift*, 90:170, 1960.
- Bleuler, M.: Die Depressionen in der ärztlichen Allgemeinpraxis. Basel, 1943.
- Bumke, O.: Lehrbuch der Geisteskrankheiten, 4. Aufl. München, 1936.
- Hess, W. R.: Ueber die Wechselbeziehungen zwischen psychischen und vegetativen Funktionen. *Schweiz. Arch. f. Neur. u. Psych.*, 15:260, 1924 und 16:36, 1925.
- Hoff, H.: The Multifactorial Approach in Psychiatry. *J. of Neuropsychiatry*, Vol. 1, No. 4, 1960.
- Kielholz, P.: Diagnostik und Therapie der depressiven Zustandsbilder. *Schweiz. Med. Wochenschrift*, 87:87 und 107, 1957.
- Kielholz, P.: Medikamentöse Therapie der depressiven Zustandsbilder. *Bull. d. Schweiz. Akad. d. Med. Wiss.*, 15:286, 1959.
- Kielholz, P.: Klinik, Differentialdiagnostik und Therapie der depressiven Zustandsbilder. *Documenta Geigy, Acta psychosomatica*, Nr. 2, 1959.
- Staehelin, J. B.: Ueber Depressionszustände. *Schweiz. Med. Wochenschrift*, 85:1205, 1955.
- Staehelin, J. B.: Ueber Selbst- und Gemeingefährlichkeit. *Praxis*, 36:616, 1947.
- Weitbrecht, H. J.: Depressive und manische endogene Psychosen. *Psychiatrie der Gegenwart*, Bd. II: *Klinische Psychiatrie*, S. 73, Springer-Verlag, 1960.

Any human being in a process of adaptation has only a certain number of psychological and physiological defenses that he can employ. . . . There is no essential difference in the psychotic and his psychological defenses and devices from the less psychotic, from the neurotic, from the so-called normal, except in one or two significant factors. The first is the severity or degree of utilization of certain mechanisms. The second is the impact and force of certain disorganizing, internal drives which are greater or lesser in some persons. And third, most significant of all, is the capacity of that person to organize, to synthesize the conflicting trends, to hold them in balance.

Thomas A. C. Rennie, M.D.

1952 Annual Conference of the Milbank Memorial Fund.

Psychoneuroses as a World Problem

JAMES L. MCCARTNEY, M.D.

Individuals diagnosed as emotionally disturbed make up about two-thirds of the patients referred to private psychiatrists, while the balance are classified as psychotic. These neurotic personalities actually make up about 80 per cent of the general population and are usually handled by general practitioners. Such patients are referred for psychiatric help only when their symptoms are extreme and have been in existence for several years. A world survey covering both the so-called democratic and communist nations bears out the conclusion that these figures are essentially the same the world around.

The evolution of the social systems appears to be an important etiological factor. The greater the social changes, and the rapidity of these changes seem to correlate with the increase in psychoneuroses. Contemporary civilized humanity is tormented by competition, anxiety, doubt, guilt, insecurity, and false standards. The spirit of nationalism leads to mass hysteria, and world-wide tension. To live anywhere in the world today means to fight for personal and collective benefits. There is not only sibling rivalry, but racial rivalry, and national rivalry. Anxiety that the cold war will become a hot war, anxiety for want of security, anxiety for raw materials to supply the factories, anxiety for food to feed the starving, anxiety that there may be no work, and anxiety over rejection. The history of civilization is based on this natural struggle for survival, but in this modern age, the means of communication and the means of rapidly carrying the means of destruction have complicated the individuals' lives.

From East to West, from the Pacific Islands, China, Japan, Ceylon, and India, to

Egypt, Italy, France, Germany, England, Poland, Russia, and America, mankind has been driven by inner psychological and sociological impulses to win in the unending battle of progress and civilization. If the individual cannot get what he wants, then he is apt to resort to psychoneurosis. Pent-up aggression must express itself, or it creates anxiety.

AROUND THE WORLD

Cuba is just south of the United States and is an island with 6½ million people who are greatly confused. They have turned to communism. Under the former regime, there was much fear and insecurity, and psychiatry was at a low ebb.

In the Pacific Ocean, almost on the equator, was a group of isolated islands, hardly touched by civilization, known as the Marshalls. Here were ten thousand people without a care in the world, without insecurity, and without sexual guilt, until World War II brought conflict to these shores. Since then has come American civilization, marriage vows, and atomic bombs.

The Philippine Islands have a population well indoctrinated for many years with religious superstitions. Before national security could be obtained, a disrupting war came, and then these people were cut adrift before political maturity. The universities are turning out more graduates than can be absorbed by industry, and communism is a constant threat. Psychoneuroses are on the increase, and it is evident that the psychiatric facilities are taxed beyond limits.

Up until about ten years ago, in Japan, the individual's status in the family, as well as in society, was determined at birth. The personality was educated and trained from early childhood to adjust to the prescribed ways of life in an authoritarian atmosphere. To the extent that the indi-

vidual was obedient and faithful to his allotted position and was content with his lot in his family and society, he could have personal security. This is now all changed.

Three major religions influenced Japanese ethics and helped in forming the social structure. Confucianism, which teaches benevolence, righteousness, propriety, wisdom, self-control, and sincerity, emphasized obedience to parents. From this came Shintoism, which stressed ancestor worship. Buddhism stresses that one cannot exist without the good will or help of other people and of all things in nature. Therefore, the person must be appropriately grateful for the debt one owes to everyone and everything. The Buddhist must not "sacrifice" animals for eating except fish. He must be satisfied with a modest and simple life, and must not aspire beyond his station in life.

Many of the young people of Japan feel they have been deceived by their leaders, teachers, and even by their parents. This is particularly true for the thirty-year-olds, who were oriented toward an authoritarian, imperialist, ultra-nationalist ideology before and during the war. They were poured into a warlike mental mold from their primary and secondary school days. Told how to think, feel, and behave, how to live and how to die, they were not trained to think critically or to behave independently. They were given much less of a general cultural education than the older generation. With the occupation by the Americans, this convenient and rigid frame for their life vanished. They were consequently disoriented and confused.

The Chinese, like the Japanese, had three major religions until the Communists took over after World War II. These were Confucianism, Taoism, and Buddhism. The great mass of the Chinese people were illiterate and haunted by innumerable superstitions. They saw devils; they heard them; they felt them; they were possessed by them, and were tor-

mented by them in every conceivable manner. In Taoism, these devils were represented as idols.

For several thousand years, the Chinese people had been adjusted to the paternal system, with submission to the Emperor, and an unquestioned obedience to the father of the family. During the last decade, this whole system has been discarded and actually, the child has been encouraged to testify against his or her parent. Through the centuries, the "father-image" had been a fearful, awe-inspiring, terrifying paternal figure, which was never questioned. During the twentieth century, and especially in the last twenty years, the paternal image, which until 1900 was unassailable and invincible, began to appear in another light. The Chinese people saw how another Asiatic race had twice defeated the white people and had defeated and humiliated their elders without incurring punishment. The events in Manchuria, Malaya, the Philippines, Indonesia, and Korea gave them courage, and so they turned against the white man.

For centuries, the father had inspired awe in his children, and for the last thirty or forty years this attitude was transferred to the new image. Feelings of hate broke loose and were immediately fixed on the white man who had helped to perpetrate the patriarchal system. Then, in the last ten years the Communist regime began to turn the children against their own fathers. When this happened, all the innate feelings of pent-up hatred and wrath were released, and many a psychoneurotic reaction resulted.

The problem in Singapore and Malaya is essentially the same as in Hong Kong, as there is about the same percentage of Chinese in the population. There is much Communistic activity in this area, with many strikes, student riots, revolts against religious traditions, and mental confusion.

Ceylon was for hundreds of years under foreign domination, but the majority of the population remained Buddhist. In spite

of the dictates of this religion, the island has been an easy victim of Communist propaganda. Nevertheless, the native women are still kept under constant protection, and women's dormitories are surrounded by walls. Passions must be repressed. Self-denial is the desired goal. Patients don't discuss their sex lives. Pacifism and meditation is the philosophy of the people. The country has an overabundance of monks, who wander the streets, living on the charity of the people.

India, with over 600 different religions, still has a caste system which has bred hate and distrust. There are twice as many men as women in the psychiatric hospitals. Over half of all the patients are under forty years of age.

It is not surprising that the peoples of India are xenophobic, apathetic, withdrawn, and fatalistic. They are brought up in a tense and hostile environment. Their shrewdness is spoken of as a virtue; and yet it reflects a suspicious, vindictive, immature, schizoid mind.

Terror fills the minds of these people who live in the shadows of past centuries. The native goes through life in the constant grip of fear, afraid of the elements, afraid of the knife that might strike his back in the darkness, afraid of the darkness itself, afraid of neighbors, afraid of foreigners whom he cannot understand and, therefore, cannot trust, afraid of the jinn who lurks behind the trees and the ghouls who, he has been repeatedly told, are so monstrous that no one can elude them, afraid of himself and of his shadow. Little wonder that in India life is one long ordeal of dread and drudgery; thousands of men drown themselves each year in the so-called holy rivers or withdraw from life to become "holy men." These frequent mass suicides, as well as many other forms of self-abnegation, self-punishment, and self-destruction are symptoms of emotional instability.

In India, the individual fights for reasons much closer to himself than political

causes. What he is asking on a national scale is essentially what he wants for his own individual needs. The young Indian who wreaks havoc in the streets is basically directing his defiance and hostility against the restraints of cultural and religious traditions, the sickly mysticism, the sacred superstitions, the autocracy of well-meaning but unenlightened parents and teachers.

The common Indian, handicapped by deeply absorbed fears, suspicions, feelings of inferiority, and vindictiveness, does not work with enthusiasm; instead he sits in the corner of his dingy hut or uncomfortable flat, underfed, underclothed, his mind handicapped by the sicknesses of centuries, weaving elaborate tapestries of fatalistic self-consolation. He clings to the perverted but convenient superstition that his fate is predestined by God.

The Western democracies offer a Christian philosophy, dogmatic truth, ideological tolerance, free thinking, the spiritual values of humanism, legality, education on Western technology, and economic assistance to nations menaced by hunger and starvation. Their opponents, the Communists, on the other hand, protest that behind this solemn and complex superstructure is the policy of exploitation of man by man, of plutocratic or colonizing greed based on military repression, of extortion perpetuated by misery, of the cultivation of pauperism and the fetishism of the dollar. Such a policy has resulted in religious and class hatred and in the material and moral dependence of a great majority of workers on a small minority of owners determined to defend their hierarchy, outdated, and unjust material privileges.

The Communists insist they are striving for purity and severity of conduct and for the equality of human beings whatever may be their culture, religion, ethnic origin, or color of skin. They claim this will be reached by the disciplined loyalty of the masses, Pavlovian conditioning, the

ennobling mysticism of work, and in accordance with a rational and concrete plan of social action. The democracies, however, point out the cruelty of a tyrannical control, lack of freedom of thought and action, sectarianism, unavowed nationalism in the pan-Slavic sense, inhuman procedures of police supervision, and the impudent propaganda infiltrating the consciousness of nations for the purpose of undermining spiritual ideals. The Communists claim that such a policy has resulted in a decrease in mental illness, but recent surveys have attested to the fact that psychoneuroses are as common under Communism as in the free societies.

The communist nations are attempting through their propaganda to control the minds of people outside as well as inside their boundaries. Experiments on the problems of altering and controlling human behavior and thought have been carried out with striking results. Pavlov's experimental approach has become the officially acceptable scientific basis for communist psychological medicine, and it has become the most acceptable basis for much of general medicine. Certainly this technic has effectively been used in the indoctrination and conversion of political and war prisoners. Pavlov proved without a doubt that many of his findings with dogs were applicable to man.

Every psychiatrist knows that Pavlov was interested not only in how he could build up new patterns of thought and behavior in his animals, but also in how he could break down and reverse patterns of behavior that he might have implanted previously by months of patient work. This led to neurotic breakdown, and the animals showed states of uncontrolled, generalized anxiety, depression, and submission. He also proved that the animals most easily affected, and those which ended by showing hysterical and self-destructive tendencies, were those most eager to cooperate in the experiments designed for their undoing. That is why

Pavlov found it necessary to bring his animals to the experiment hungry and tensed up. So communist propagandists have found their most effective results in discontented and half-starved nations.

In the past, dictators have shown how effective continuous conflicting and alternating signals can be in bringing about a final state of physical exhaustion and consequent psychological submission to their demands. This method was used in pre-war Germany and Italy and has effectively been used in other totalitarian states. It is therefore logical that the senseless and confusing signals being sent out around the world, with the present ease of communication, should cause every country to suffer from an increase in psychoneuroses.

Both the Western democracies and the Communists are greatly interested in science. The Western bloc proclaims the increased technical perfection of its scientific research, but this is challenged by the Communists. They both claim that mental illness will be banished by a chemical balance. But the common man is caught between the contradictions that the Communists spread across the world with their implacable "truth" of Marxism, while the Western democracies introduce the Paulist "truth" in the name of Christianity. It is uncertain what the identification will be, but one thing is certain, and that is "that those whom the gods wish to destroy, they first of all drive mad."

CONCLUSIONS

The melancholic truth brought out by psychiatric history is that emotional illness is on the increase around the world.

There has been a universal deterioration of personal, social, and political morals. Family discord and divorce, movies, and comic books of crime and gangsterism, magazines, books, radio, and television stories of murder and pathological behavior, labor disputes, aggressive picketing, and sabotage all reflect a climate of ten-

sion and hostility the world around. Everywhere there are symptoms of this basic sickness of contemporary society. Increasing unemployment, subordination of the individual to the industrial and administrative machine, the development of numerous modes of evading the realities of life, along with a compulsive urge toward warmaking, betray the degenerative and regressive trends in civilization.

The complexities of living in the modern civilized world have become too great for unstable personalities. They are almost beyond human comprehension. The rapid extension of the individual's environment through improved communications and transportation has so overwhelmed the civilized world that nothing more can be done than to grasp frantically at isolated bits of reality in the feverish effort to hold the world together.

Both aggression and regression have a powerful impact on world affairs through

the medium of leadership. It is a grim truth that the foundations of international relations are being undermined to a considerable degree by psychologically incompetent men in key positions. There is an astonishing amount of schizoid self-interest, pettiness, shortsightedness, narrowness, bigotry, and greed exhibited by highly placed persons in many of the nations around the world. Racial, religious, and political persecution, hatred, and bigotry exist in flagrant form in every part of the world.

REFERENCES

1. McCartney, James L., M.D.: "Neuropsychiatry in China." *Arch. of Neurol. and Psychiat.*, 18: 7 (July) 1927.
2. ———: "Paradise Lost: The Psychopathology of the Marshall Islanders." *J. Clin. Psychopathol.*, 8:3 (Jan.) 1947.
3. ———: "The Practice of Psychiatry Around the World." *A.M.A. Arch. of Neurol. & Psychiat.*, 75:6 (June) 1956.
4. ———: "Schizophrenia as a World Problem." *Dis. Nerv. System*, 19:12 (Dec.) 1958.

If we look at the cerebral cortex in this way, as a machine, the apparent conflict between psychogenesis and somatogenesis begins to evaporate. A machine may function badly because it was constructed from inferior materials, because of water in the gasoline, because of rusting from being left out in the weather, because of long, hard usage, or merely from overloading. Of course an inferior machine will break down sooner from overloading, but even the best machine has its limits. In the same way a nervous system may function badly because of hereditary or congenital defect, because of improper food supply, because of being soaked in alcohol, because of constant wear from interminable conflict or from a single overwhelming crisis.

Percival Bailey
in *Cortex Mind*.

Anorexia and Central Nervous System Stimulation

THEODORE M. FEINBLATT, M.D., and EDGAR A. FERGUSON, B.S.

It has been stated that amphetamines and their congeners derive their anorectic effect from central stimulant actions rather than specific depression of appetite, that their tendencies to cause restlessness, insomnia, and anxiety are intimately linked with anorexia, and that these effects are common to all such compounds when used in therapeutic dosages.^{1,2} The study to be reported here was undertaken to compare the stimulatory or side effect liability of phenmetrazine and d-amphetamine in overweight patients, and to determine whether dampening it by sedation interferes with the hoped-for anorexia.

Ninety-one men and women who wanted to lose excessive weight comprised the series. After work-up and initial interview, they were given placebo, phenmetrazine, d-amphetamine, and combined d-amphetamine-amobarbital according to a prearranged latin square design so that each of the drugs was given first, second, third, and fourth approximately the same number of times. An assistant dispensed the drugs in coded envelopes, numbered serially. Neither of us knew which patients were getting which drugs, although we did know the drugs being tested. Patients were on each of the three drugs and placebo for one week. The drugs used were in a long-acting form that provides therapeutic action for 10-12 hours with one dose. Patients were told to take one dose a day and to restrict caloric intake to 1200; they were given diet sheets listing the caloric values of common foodstuffs.

Of the 80 who remained in treatment four weeks, slightly more than half had not previously taken stimulant-type anorectics. The 11 who dropped out did so during the first or second week because they experienced disturbing side effects or were discouraged by failure to lose weight; seven had been started on placebo.

RESULTS

The table summarizes answers to a uniform set of questions about central stimulation put to patients in this series during each of four consecutive weekly office visits. It shows, first of all, a rather high incidence of central nervous system stimulation, which to some extent reflects the difference between soliciting this sort of information and merely recording spontaneous comments. In any event, there seems little doubt that central nervous system effects and anorexia are associated. It shows, too, that complaints of hunger occur more frequently with placebo than active drugs, that d-amphetamine causes more insomnia than phenmetrazine, but that phenmetrazine causes more nervousness. It shows, finally, that a sedative given concomitantly reduces these effects without compromising appetite suppression.

Although the study was not primarily concerned with weight loss, it was observed that, on the average, patients on active drugs lost about a pound a week; some lost more, some less. It is of interest that 25 per cent of the patients complained of hunger while on placebo; more than half failed to lose, or actually gained a little weight during the time they were on placebo. They actively complained, or

TABLE I
Effects Reported in 80 Patients Taking Anorectic Agents

Effect	Placebo	D-Amphetamine	Phenmetrazine	D-Amphetamine-Amobarbital
Insomnia	2	15	9	2
Nervousness	8	37	40	6
Hunger	22	7	14	5
Felt Better	15	16	9	36

showed in other ways their dissatisfaction. This appears to support the observations of Gelvin, et al.³ that anorexigenic agents are superior to placebo.

Those who would rely solely on advice, reassurance and similar supportive means to aid obese patients shed weight handicap themselves and their patients in what appears to be, with or without drugs, a losing battle in most cases. As far as stimulating anorectic drugs are concerned, there is no one of choice. All depend on a central stimulation to control appetite, in effective dosage; all have the same side effects. Sedatives used concomitantly, however, appear to reduce the side effects.

Finally, a physician can often spare himself much discouragement and frustration in treating the obese if he will first explore to a reasonable degree just why the patient overeats. Is it boredom, anxiety or what? Patients with prominent and inflexible emotional conflicts need more than sermonizing and well-meant

but seldom-followed advice. Forbidding them sweets and other goodies may make matters worse. Failure is almost a certainty unless such supportive measures as reassurance, sympathy, and encouragement are employed in large doses to help them reevaluate their life situations, cope with problems, and adjust to handicaps. At times, the short-term use of tranquilizers may be indicated. But in the long run, overeating is the lesser evil to use of tranquilizing drugs without an earnest effort to help troubled patients vent their resentments to life or to live with their conflicts.

(T.M.F.) 150 Woodruff Ave., Brooklyn, N. Y.

REFERENCES

1. Harris, S. C., Ivy, A. C., and Searle, L. M.: *J.A.M.A.*, 134:1468-1475 (Aug. 23) 1947.
2. Fazekas, J. F., Ehrmantraut, W. R., Campbell, K. D., and Negron, M. C.: *J.A.M.A.*, 170 (9): 1018-21 (June 27) 1959.
3. Gelvin, E. P., McGavack, T. H., and Kenigsberg, S.: *Am. Pract. & Digest of Treatment*, 9(12):2008-10 (December) 1958.

Do you know what it is to succumb under an insurmountable day-mare . . . an indisposition to do anything, or to be anything; a total deadness and distaste; a suspension of vitality; an indifference to locality; a numb, soporific, good-for-nothingness; an ossification all over; an oyster-like insensibility to the passing events; a mind-stupor; a brawny defiance to the needles of a . . . conscience.

Charles Lamb: *On Depression*

From Roche Medical Magazine, December 1960.

Drugs and the Autonomic Nervous System

KARL RICKELS, M.D.

For many years investigators have been interested in the relationship of autonomic nervous system (A.N.S.) functions to stress and psychologic disturbance. From Eppinger-Hess' concept of "sympathicotonia-vagotonia," to Cannon's reintroduction of Bernhard's concept of "constancy and homeostasis" of the A.N.S. and his "fight-flight elaborations," to Hess' concept of "trophotropic-ergotropic" autonomic functions, to J. I. Lacey's "organ specificity of A.N.S. reactions," to Gellhorn's concept of "autonomic imbalance," authors have been concerned with the relationship of stress and emotional illness to central and peripheral A.N.S. activity.

Recently, with the introduction of new psychopharmacological agents acting on midbrain structures and reducing anxiety, interest in the function of the central A.N.S., particularly the hypothalamus and its relation to mental illness has been intensified. More light is being shed constantly on the important relationships which exist between such structures as the limbic system, the thalamus, the brainstem reticular formation, and the hypothalamus.

At present, it is felt that the hypothalamus acts as an integrator of autonomic and motor components involved in the expression of emotion but that the capacity to feel emotion is associated with the rhinencephalon and forebrain or limbic system.

The limbic system has important viscerosomatic and neuroendocrine functions which are mediated through the hypothalamus. There seems to exist a negative feedback mechanism between hypothalamus

and the limbic system, the latter acting as a damping influence on the hypothalamus and reticular formation.

Reticular formation activity is constantly influenced by metabolites and neurohumors (e.g. adrenalin, noradrenalin). It is further influenced by continuous nerve impulses coming from intero-, extero- and proprioceptors as well as by inflow from other brain structures. Reticular arousal is the route by which stressful stimulation leads to hypothalamic-pituitary activity. It has been found that compounds known to reinforce adrenalin effects, such as cocaine, excite reticular formation activity while anti-adrenalin compounds depress such activity.

While the action of the brainstem is more global, and long-lasting, the diffuse thalamic projection system produces more specific, briefer effects; it is considered to represent the discriminative control over sensory input. The overshadowing of the latter system by the brainstem and by the hypothalamus may have its psychological counterpart in the failure to discriminate under high emotion and excitement. Autonomic responses are primitive and involve phylogenetically older parts of the brain which cannot distinguish in man between external threat and internal threat (e.g. inverted anger, depression, fear).

Finally, the cortex may activate itself via stimulation of the reticular formation (without sensory input), releasing excessive amounts of adrenalin as for example, in insomnia, when the person wrestles with emotional problems.

The hypothalamus as the central part of the A.N.S. regulates sympathetic and parasympathetic discharges. Nociceptive and proprioceptive stimuli as well as changes in bloodpressure (via sino-aortic baroreceptors) influence not only medullary regulatory mechanisms but also hypothalamic

Assistant Professor of Psychiatry, University of Pennsylvania.

Work reported in this paper was supported in part by USPHS Grant MY 2934.

Presented at the Seventh Annual Meeting of the Academy of Psychosomatic Medicine in Philadelphia, Pa., October, 1960.

and even cortical activity. Hypotension stimulates hypothalamic and cortical activity and increases sensory input while hypertension or heart rate acceleration depresses them.

Finally, it was demonstrated that peripheral autonomic responses, particularly systolic blood pressure, to a standardized experimental stress (e.g. methacholine produced hypotension, coldpressor pain stress) can be considered indicators of central autonomic reactivity. Different patterns of cardiovascular response are produced, depending on whether the primary experienced emotion is anger or fear and anxiety. In the former, relatively more noradrenalin is released, in the latter, more adrenalin.

Many variables may influence A.N.S. reactivity: the duration and intensity of a given stress, the state of the effector organs on which the sympathetic and parasympathetic impulses act, the availability of specific enzymes, the state of the autonomic ganglia and, last but not least, the state of central autonomic structures, particularly hypothalamic ones.

It is felt that the central A.N.S. and its reactivity is of great importance for regulating stress responses and the concomitant changes in sensory input and perception, and consequently for emotional illness in general. Therefore, an investigation of the effects of psychopharmacological agents on autonomic responses to physical and emotional stress will contribute to a better understanding of drug effects as well as of emotional illness.

Centrally acting drugs may effect the sympathetic as well as the parasympathetic part of the autonomic nervous system; often, however, one system more strongly than the other. For example: a sedative or tranquilizer may effect not only the posterior or sympathetic part of the hypothalamus, but also the anterior or parasympathetic part, as well as many other brain areas. The predominant clinical effect of such a drug will depend on

many factors, including the relative reactivity of both parts of the A.N.S.

When it was found that chlorpromazine decreases the alerting response of the reticular formation while reserpine activates it, it was concluded that other centers than the reticular formation alone must be important for tranquilization. As both drugs inhibit hypothalamic activity, mainly in the posterior part, it was felt that the hypothalamus is important for the effect of tranquilization.

Since meprobamate depresses thalamic activity, as well as the activity of some limbic areas, but not hypothalamic ones, we felt that a decreased coldpressor stress response produced by meprobamate would add weight to the importance of diencephalic centers other than hypothalamic ones for stress responses and for the production of anxiety. The effect of drugs on anxiety seems therefore to be related to their influence on at least three structures, the brain stem, the thalamus and the hypothalamus. The hypothalamus is probably one of the most important brain structures related to anxiety, since alleviation of anxiety is the property of drugs that depress hypothalamic activity. This activity, however, may also be diminished when the reticular alerting mechanism is depressed, since the flood of impulses impinging on the hypothalamus from without or within is then reduced.

A very short summary of some of our recent work as it relates to A.N.S. functions follows:

As mentioned before, it could be shown in animal experiments that small amounts of circulating epinephrine increase the reactivity of the central nervous system including the A.N.S., while large amounts decrease such reactivity. Furthermore, proprioceptive stimuli increase the electrical activity of the hypothalamus and make it more reactive.

We found the same effects in humans. Subcutaneous injections of small doses of adrenalin, as well as proprioceptive stim-

uli (motor activity on an ergometer) increased central autonomic reactivity. This was demonstrated by an increased rise of systolic bloodpressure under coldpressor stress both at the height of the adrenalin effect as well as 15 minutes after one hour of light motor activity. These results underline the findings of others that mild anxiety or stress exert a stimulating effect on the hypothalamus and other midbrain structures.

In earlier publications we found that an inverse relationship existed between systolic bloodpressure rise under coldpressor stress and systolic bloodpressure drop after methacholine injection. The systolic bloodpressure response in both tests was felt to depend largely on central autonomic reactivity.

Lately, drugs have been shown to influence cardiovascular response to stress (autonomic reactivity); for example, chlorpromazine increases the systolic hypotensive area produced by the injection of methacholine, and barbiturates in large dosages decrease systolic bloodpressure responses to the coldpressor stress.

Since an emotional illness in general may be viewed as response to acute or chronic stress, be it intra- or extra-psychic, it seemed likely that an experimental stress might represent a situation somewhat comparable to emotional non-experimental-life stress. Drug effects, studied in such an experimental stress situation, might yield important information about drug action, clinical drug efficacy, anxiety levels of various diagnostic groups, and last but not least, the state of the central autonomic nervous system in different psychiatric groups. The more a given pharmacological agent acts clinically as a tranquilizer, as compared to a sedative, the more it will exert effects on various midbrain structures and the less on the cerebral cortex. Therefore, it was hypothesized that under standard experimental conditions an anxiety reducing drug given in non-sedative dosage should

decrease autonomic response to an experimental stress, that is, should decrease central autonomic reactivity. Systolic bloodpressure was chosen as the main physiological measure because it has shown to give a constant stress response irrespective of whether mainly adrenalin or nor-adrenalin was liberated by the coldpressor stress. Heart rate is differentially effected by these neurohumors.

We studied the effects of amobarbital sodium 200 mg./60 kg., meprobamate 400 mg., and placebo on cardiovascular responses to the coldpressor stress in normal subjects and the same agents plus chlorpromazine (100 mg.) in schizophrenic subjects. We hypothesized that drug action would be more marked in the normal group than in the schizophrenic group and that autonomic reactivity would be lower in the schizophrenic group.

Our hypotheses were confirmed. In the normal subjects, only meprobamate decreased autonomic reactivity as measured by systolic and diastolic bloodpressure stress response. In the schizophrenic group hardly any differences between drugs and placebo existed and stress response (reactivity) was lower than in the normal group. Apparently a one shot acute drug dose was not strong enough to effect autonomic mechanisms operating in the schizophrenic subject.

Furthermore, carisoprodol, a muscle relaxant, and imipramine, an antidepressant, were tested in the same manner. We found that imipramine influenced neither cardiovascular baselevels nor stress responses, while carisoprodol increased baselevels slightly and decreased stress response significantly, supporting laboratory findings that carisoprodol exerts certain effects on midbrain structures.

In conclusion, it may be said that A.N.S. functions are closely interrelated with diencephalic and brainstem functions. The A.N.S., particularly its reactivity, plays an important role in stress response, in anxiety, and in emotional illness. Finally,

central autonomic reactivity can be altered by psychopharmacological agents.

BIBLIOGRAPHY

1. Ax, A. F.: *Psychosomat. Med.*, 15:433, 1953.
2. Bray, G. A., Funkenstein, D. H.: *Dis. Nerv. Syst.*, 19:1, 1958.
3. Gellhorn, E.: *Autonomic Imbalance and the Hypothalamus*. Minneapolis: Univ. of Minnesota Press, 1957.
4. Hess, W. R., Albert, K.: *Arch. Neurol. & Psychiat.*, 73:127, 1955.
5. Himwich, H. E.: *Science*, 127:59, 1958.
6. Ingram, W. R.: *Clin. Symposia*, 8:117, 1956.
7. Jaspers, H. H.: *Reticular Formation of the Brain* (International Symposium), Boston: Little, Brown and Co., 1958.
8. Lacey, J. I.: "Psychophysiological Approaches to the Evaluation of Psychotherapeutic Process and Outcome," in *Research in Psychotherapy*, National Publishing Co., p. 150, 1959.
9. MacLean, P. D.: *Am. J. Med.*, 25:611, 1958.
10. Magoun, N. W.: *The Waking Brain*, Springfield: Chas. C. Thomas, 1958.
11. Papez, F. W.: *Arch. Neurol. & Psychiat.*, 38:725, 1937.
12. Ramey, E. R., Goldstein, M. S.: *Physiol. Reviews*, 37:155, 1957.
13. Rickels, K., Fochler, F., Ewing, J. H.: Unpublished manuscript.
14. Rickels, K., Ewing, J. H.: *J. Clin. Exp. Psychopathology*, 20:303, 1959.
15. Rickels, K., Ewing, J. H.: Psycho-Physiological responses to coldpressor stress as altered by pharmacological agents in normal and schizophrenic subjects, presented at 2nd Collegium Internationale Neuro-Psychopharmacologicum, Basel, July 1960, in press in proceedings.
16. Rickels, K.: *Mass. Dept. Mental Health*, pp. 74-87, 1960.
17. Samuels, I.: *Psychol. Bull.* 56, 1, 1959.

We live in an era of collaboration and integration. . . . In this light I see the developments of the next ten years in a growing integration of the biologic, psychodynamic and sociologic approaches, and the emergence of a comprehensive psychiatry which no longer attempts to solve the great mystery of human behavior from one single restricted point of view, but in each approach, trying to enrich itself by considering rather than disregarding, or minimizing, the contributions coming from the other avenues of research.

Franz Alexander, M.D.

From A History of Psychiatry
by Jerome M. Schneck, M.D.

Chest Pain of Coronary Origin

BURTON L. ZOHMAN, M.D.

Despite the great frequency of coronary artery disease, the heart was not seriously considered as the cause of pain until 1772 when Jenner clearly associated angina pectoris with obliteration of the coronary arteries. This observation followed Heberden's¹ classic description of angina pectoris by about four years and although Heberden failed to relate angina pectoris to coronary disease, his clinical description in one sentence has not been improved upon for simplicity and clarity in the two centuries which followed. It reads thus: "They who are afflicted with it are seized while they are walking (more especially if it be up hill and soon after eating) with a painful and most disagreeable sensation in the breast which seems as if it would extinguish life if it were to increase or continue; but the moment they stand still, all this uneasiness vanishes."

In spite of these accurate early observations, it was not until 1912 that Herrick² related the severe pain of "status anginosus" to myocardial infarction after coronary thrombosis and it was not until 1928 that a clear understanding of the mechanism of the pain itself was obtained. At that time, Keefer and Resnik³ crystallized the concept that the mechanism of the pain in angina pectoris is the relative disproportion between the myocardial demand for oxygen and its supply.

Although the etiology of coronary atherosclerosis remains unknown, there can be no doubt that deranged lipid metabolism may be one of a number of predisposing causes. However, there is increasing evidence to indicate that other factors include heredity, physical exercise, accele-

rated blood clotting and emotional stress. More recently it has been shown by Raab⁴ that sympathetic adrenergic effects on vascular tissue metabolism contribute greatly to atherogenesis. The deposition of cholesterol in the intima is accelerated and intensified by epinephrine and catecholamine-phospholipid compounds which seem to possess a particular affinity for arterial tissue.^{5,6} The arterial walls contain relatively large quantities of potentially injurious catecholamines (epinephrine from the adrenal medulla and arterenol from the sympathetic nerve terminals), the tissue necrotizing properties of which have been long recognized. These hormones, by primarily injuring the intima, may prepare the soil for subsequent lipid depositions. Catecholamines diminish myocardial efficiency and by wasting oxygen in a disproportionate fashion, are capable of inducing severe potentially necrotizing myocardial hypoxia.⁷

Angina pectoris is not a specific disease but rather a symptom complex that constitutes a clinical entity with a characteristic clinical course. The pathologic-anatomic basis for angina pectoris may be varied, including severe coronary atherosclerosis with extreme narrowing, coronary thrombosis without myocardial infarction and other conditions such as encroachment on coronary arteries by tumors and syphilis, distortion of the aortic valves, certain rare forms of arterial disease such as Buerger's or Raynaud's disease, embolism and prolonged hypotension due to shock which may result in poor coronary circulation. There is a small but important group of patients in whom angina pectoris is precipitated by thyrotoxicosis, polycythemia vera, anemia and abnormal cardiac rhythms. It is probable that these patients also have underlying coronary arteriosclerosis. The diagnosis

From Maimonides Hospital and State University, College of Medicine, Brooklyn, New York, N. Y.

Presented at a Panel Discussion entitled "Chest Pain—Somatic and Psychic Factors" at the 7th Annual Meeting of the Academy of Psychosomatic Medicine, Philadelphia, Pa., Oct. 15, 1960.

is usually made by the history alone. In one-third to one-half of the cases of angina pectoris, the electrocardiogram is normal. If found to be abnormal, only nonspecific changes are seen.

The pain of angina pectoris is most frequently retrosternal, oppressive squeezing or choking in character and radiates to the inner aspect of the left arm, neck or jaws and is usually brought on by exertion, intense emotion, ingestion of food or exposure to cold. Angina very rarely is located entirely lateral to the apex of the heart. In fact, it seldom ever starts lateral to the nipple line and women who frequently have pain beyond the left nipple line seldom have real angina. Angina pectoris is infrequent in women under 45 without hypertension or diabetes. The behavior of the pain including its mode of onset and offset, its duration, its relationship to exertion and to specific activities, positions and movement, and its response to drugs is of the utmost importance. The pain of angina pectoris, in sharp contrast to the pain of many benign disorders, has a gradual onset, usually building steadily to its maximal intensity over a period of a minute or two with an offset quite similar to the onset. The duration of the paroxysm of angina pectoris is usually brief, most frequently three to ten minutes. It rarely, if ever, has a duration of less than a minute and if significantly longer than fifteen minutes, should raise the question of myocardial necrosis, preinfarctional angina or some extra cardiac mechanism. Angina typically comes during exercise, or not long afterward, as is typical of certain skeletal disorders, though occasional exceptions are seen. It almost never comes immediately with the onset of exercise but only after a sufficient time has elapsed to bring about an increase in the work load of the heart. It very rarely is associated only with a specific activity but rather with a degree of activity necessary to unbalance the supply-demand for myocardial oxygenation.

The response to nitroglycerin is perhaps the most critical of all the behavior characteristics of angina pectoris. Response of the pain is rapid, and to be of diagnostic significance, the pain should be relieved within three minutes and certainly no longer than five minutes. The pain of angina pectoris must be completely relieved by the drug, not partially. The ability of nitroglycerin to increase the exercise tolerance is of more diagnostic import than the relief of pain once it is present. Failure to respond to nitroglycerin must be evaluated in terms of the adequacy of the dose employed. While it is true that the majority of patients respond to ordinary doses of nitroglycerin, 1/100th to 1/200th of a grain, an occasional patient is seen who has developed unusual tolerance of the drug and may require up to ten times these amounts. The rapid deterioration of the drug when not kept in a tightly closed brown bottle is a common source of error. In addition, one must be certain that the patient is using the hypodermic type of tablet sublingually.

The patient with angina of functional origin may experience two types of precordial pain rarely referred to the retrosternal area. The more common type is a sharp piercing or stabbing type of pain in the region of the nipple which seems to penetrate into the chest itself. With the pain, many patients become aware of irregular heart action while some experience forceful heart action. It is thought that the pain in these cases originates from the nerve fibres in the heart muscle as a result of the arrhythmia or forceful heart action. The second type of precordial pain is a dull aching, persistent discomfort frequently described as "soreness." It is associated with fatigue, is not too sharply localized as the first type of pain, lasts for hours instead of minutes, and usually does not come on immediately after exertion.

While it is true that in most instances

the diagnosis of angina pectoris is made with ease and assurance from the history alone, without electrocardiography, there are cases when the quality, site, distribution, duration or relation of effort of a chest pain that is suggestive of angina pectoris does not conform to classic concepts. In these instances the Master two-step test is a reliable, objective test. It consists of stair climbing, the most natural form of exercise, but in contrast to ordinary stair climbing, it permits constant observation of the patient and allows the electrocardiogram to be inscribed immediately after termination of activity. Since it entails a routine type of work, fear and apprehension, which may invalidate tests of cardiovascular function, are held to a minimum. By extensive observation, Master has standardized the amount and rate of exercise according to age, weight and sex and has established criteria for a positive test. In sharp contrast, other procedures frequently subject the patient to unnatural and excessive physical strain which may evoke psychic, mental and physical reactions interfering with accurate estimation of cardiac function. Since such tests have not been standardized, they are often hazardous. The two-step exercise test when properly executed and interpreted according to the criteria of Master, is a useful adjuvant in the differential diagnosis of coronary insufficiency. While a negative test does not exclude coronary insufficiency, a positive one strengthens the diagnosis. The only conclusive evidence of a positive test is ischemic S-T segment depression in excess of .5 mm. in any lead. Difficulty will be infrequently encountered if the physician remains aware of the normal and functional variations which occur in the electrocardiogram after exercises and if he views the test as but one of a series of evaluations which should lead him to his final judgment.

The work of Robb and his associates⁸ wherein they classify the S-T depressions

into ischemic S-T depression and S-T junction depressions, has been of help in interpreting the Master two-step test. In the S-T junction depression type of response, only the point of junction of the S wave with the following S-T segment is depressed more than .5 mm. and the S-T segment itself curves rapidly upward to the peak of a normal T wave. In the ischemic type of S-T segment depression, the entire S-T segment is depressed horizontally or sags downward.

It is of interest to note that fear, stress and emotional upset can give rise to changes in the electrocardiogram which are indistinguishable from those of coronary artery disease.⁹⁻¹² Mainzer and Krause,⁹ using as their subjects individuals who were about to undergo surgery, studied the influence of fear on the electrocardiogram and found that almost half of their patients showed the picture of coronary insufficiency consisting of S-T depression and T wave inversion or flattening, transitory in nature and disappearing within twenty-four hours. They called these electrocardiograms "fear electrocardiograms" and felt that the changes were due to the effect of vagal stimulation. Wolff¹³ found tachycardia and T wave changes consisting of inversion and in some cases, depression, in 50% of the electrocardiograms taken during stressful situations. There have been many other studies reported with relevant observations.¹⁴⁻¹⁷ The consensus of opinion seems to be that the T wave changes during emotional disturbance are the result of sympathetic stimulation rather than cardiac anoxia.

In many patients with angina pectoris, a progressive increase in the frequency of the episodes under the same or decreased work load denote imminent myocardial infarction. This has been variously called pre-infarctional angina, status anginosus or coronary insufficiency. Hyperthyroidism, spontaneous hypoglycemia, severe emotional stress, altered meal

habits, abnormal cardiac rhythms and early left ventricular failure can trigger the episodes. The pain differs from the ordinary type of angina pectoris only in its increased duration (35 to 45 minutes or longer) and its diminished response to nitrites. The pain of myocardial infarction begins gradually, building steadily to a plateau of maximal intensity.

Like most patients, the patient with coronary artery disease is subject to the usual stresses of life and tries to cope with them to the best of his ability. In addition, he bears a further burden which is not present to so great a degree in patients with disease of other organs; namely, fear of his illness. "This fear may become the most important aspect of medical management and may produce more disability than the disease itself. For even the most stable individual to be told that his heart is diseased, may be a terrifying experience no matter how gently the news is broken. If the diagnosis is not fully understood and if the physician's reassurance is only casual, the patient may develop exaggerated fears concerning his prognosis. Even a minor, asymptomatic electrocardiographic abnormality of no clinical importance may cause the patient to brood about the future support of his family, about the possibility that he may become a hopeless invalid and about the possibility of sudden death."¹⁸

Perhaps the most important problem which faces the practicing physician in the management of his patient with myocardial infarction is that of rehabilitation. The duration of convalescence and the decision as to whether and when a gainful occupation may be resumed, must be determined individually in each case. Patients who recover from the acute attack and who experience little or no distress as they become ambulant, should spend the ensuing few weeks in gradually resuming normal care of themselves in the home and should take short walks outdoors so that by three months from the onset of illness,

they should be back at work. Great clinical judgment and tact on the part of the physician are needed, since some vigorous men are intolerant of this delay while others are timorous, over-cautious and tend to become semi-invalids. A great deal of cardiac neurosis results from the whole affair—the pain of the attack, the rush to the hospital, the strict regimen of rest and the knowledge that this is a commonly fatal disease. It is important to discuss with the patient, early in the course of his disease, the optimistic aspects of myocardial infarction, emphasizing his chances of full recovery and return to his usual routines of life. That this is possible for the majority of patients who survive the initial period of infarction has been well documented during the past twenty years. This discussion should include, when it seems indicated, information on the development of the collateral circulation as well as on the possible role of fats in the etiology of coronary artery disease and it should continue through the course of the patient's acute illness, his recovery period and even long afterward. It is often necessary to adjust the patient to the necessity for indefinite or permanent retirement from work or business. Psychotherapy becomes a predominant element in medical management.

In treating emotional factors in cardiac disease, the physician's actions must be such as to avoid creating disability and fear in his patient. A calm, painstaking and frank explanation of the diagnosis, together with an explanation of the treatment and the prognosis, will do much to avoid anxiety. It is the duty of the physician to keep his patient optimistic. He must urge him to carry on in spite of symptoms within the limits of his cardiac reserve. He must understand the behavior of the heart under the stresses of daily living and strive to learn as much as possible about the background and personality of his patient, and mental attitude toward his illness and his fears. Treatment

of the physical illness, no matter how scientifically carried out, may not relieve the emotional and psychic symptoms. Finally, the inestimable value in rehabilitation of "faith"—faith of the patient in his doctor, faith in his drugs and methods and faith in oneself cannot be overemphasized.

7223 Ft. Hamilton Parkway, Brooklyn 28, New York.

REFERENCES

1. Heberden, W.: *M. Trans. College of Phys.*, London, 2:59, 1768.
2. Herrick, J. B.: *J.A.M.A.*, 59:2015, 1912.
3. Keefer, C. S., and Resnik, W. H.: *Arch. Int. Med.*, 41:769, 1928.
4. Raab, W.: *Arch. Int. Med.*, 101:194, 1958.
5. Danisch, F.: *Beitr. Path. Anat.*, 79:333, 1928.
6. Raab, W.: *Amer. J. Cardiology*, 1:13, 1958.
7. Raab, W., and Humphrey, R. J.: *J. Phar. & Exper. Therapy*, 89:64, 1947.
8. Robb, G. P., et al.: Annual Meeting, Assoc. Life Ins. Med. Directors, New Orleans, La. (Oct. 24, 1956.)
9. Mainzer, F., and Krause, M.: *Brit. Heart J.*, 2:221-1940.
10. Logue, R. B., et al.: *Amer. Heart J.*, 28:574, 1944.
11. Magendantz, H., and Shortsleeve, J.: *Amer. Heart J.*, 42:849, 1951.
12. Weiss, B.: *Amer. J. Psychiat.*, 113:348, 1956.
13. Wolff, H. G.: *Circulation*, 1:187, 1950.
14. Loftus, T. A., et al.: *Amer. J. of Psychiat.*, 101:697, 1945.
15. Graybiel, A., et al.: *Amer. Heart J.*, 27:524, 1944.
16. Thompson, W. P.: *Amer. Heart J.*, 25:372, 1943.
17. Master, A. M., et al.: *Amer. J. of Med. Sci.*, 297:435, 1944.
18. Silverstone, L. A.: *Bull. New Eng. Med. Cent.*, 3:19, 1957.

The personality should be considered more than an inconvenient appendage of the particular organ the physician happens to be studying.

A. Gregg
From Psychiatry in the Medical Specialties
by Flanders Dunbar, M.D.

196
su
pro
dis
de
hav
pre
cos
ph
"so
the
cal
exa
the
cho
A
cer
qui
sur
vol
fect
selv
tion
trea
pati
In
aspe
less
of
pre
sible
ticip
tient
Th
be ex
case
has
fact
know
divid
synd
loom
Pre
the A
delph

The "Somato-Psychic" Aspects of Cosmetic Surgery

LOUIS JOEL FEIT, M.D.

I have become convinced that "plastic surgery" deals with phenomena which are precisely the converse of "psychosomatic" disorders, because the latter category deals with physical complaints that may have their origin in the mind of certain predisposed individuals. In the field of cosmetic surgery we deal with another phenomenon which might be called the "somato-psychic" disorder. The term and the orientation it suggests is that a physical deformity, either real or imagined or exaggerated, may assume proportions in the mind which can even approach psychotic ideation.

Although our surgical specialty is concerned largely with congenital and acquired deformities as well as with esthetic surgical problems, we are also deeply involved with the emotional and mental effects of both the physical problems themselves and the effects of surgical correction, particularly in those cases where the treatment is *voluntary* on the part of the patient.

In short, while we repair the somatic aspect of the deformity, we must be no less closely concerned with the observation of postoperative psychic effects. Even pre-operatively, we are sensitive to possible "somato-psychic" involvement, anticipating the possible effect upon the patient of the surgical procedure.

The term "somato-psychic" might even be extended into "somapsychosis," in those cases wherein physical deformity *per se* has caused or has been the determining factor in a true psychosis. All of us have known cases involving hypersensitive individuals who have developed a chronic syndrome in which a physical deformity looms as a profoundly contributory factor.

Regardless of whether we discuss "somato-psychic" phenomena or "somapsychosis," surely the effects upon the mind have for a long time been of great importance to reconstructive surgeons. In the 15th century, the Italian surgeon Caspar Tagliacozzi, who is credited with the first total reconstruction of the nose by the forearm flap, described his work in this way:

"We restore, repair and make whole those parts of the face which nature has given but which fortune has taken away, not so much that they may delight the eye but that they may buoy up the spirit and help the mind of the afflicted."

The present paper will be concerned with two aspects of the problem under consideration:

1. A theoretical discussion of the psychic involvement.

2. The setting forth of several criteria which may be of use to the practitioner as well as to the surgeon; criteria which rather conclusively indicate psychic disturbance and the need for referral of the patient to the psychiatrist.

Discussion of Psychic Factors

It is not unusual in these days to refer to plastic surgery as an adjuvant to psychotherapy. Though it may be urgent, elective or "voluntary," this type of surgery, particularly the last-named, is of great interest to the physician, who must quite properly be concerned with the psychology of the patient.

We know that complaints about deformities may be a mask for more profound inner conflicts. Before any operation is advised or performed, general practitioners, surgeons and psychiatrists should all evaluate the presence of existing psychopathology. We suspect that in our specialty we find a higher potential or even actual percentage of disturbed patients

than in other non-psychiatric disciplines; but in practice we have seen very few seriously disturbed individuals among those volunteering for plastic surgery. In no respect would we minimize the fact that surgery is largely contraindicated in the severely or even latently disturbed patient.

There is a vast difference between neurosis and psychosis, and the borderline is frequently very difficult to determine. We rarely operate on the psychotic, whereas it is not uncommon to operate on the neurotic.

An excellent differentiation between these two mental states is made by Palmer:

"The diagnosis of psychosis is usually not difficult. Distortion of reality, confusion in thinking and bizarre, unpredictable behavior are typical of this condition. The psychotic patient tends to lose the ability to discriminate between his inner experiences and the facts of reality; thus, he generally fails to realize that he is ill. Neurosis is characterized by the consistent, day-to-day presence of symbolic complaints, signs or symptoms that are used to disguise some inadequacy of the patient that he cannot accept consciously. The complaints, symptoms or signs have no real meaning in terms of physical anatomy, time or external occurrences. They involve the parts of the body only in terms of their functional meaning to the patient. These 'symptoms' are . . . a part of the total reaction of the patient."

• Proper differential diagnosis facilitates the total therapy and management of patients, particularly for the family physician, who must deal with the total individual, besides taking into consideration the patient's relationship with family and society. These social factors can be readily observed. We are made aware of the patient's contact with others, of any embarrassment or lack of self-assurance that he suffers, of the degree of withdrawal or compensatory activity. In addition to our observations of this "self-image," we become aware of how he feels about others. Sometimes both of these images are remarkably distorted. As Robert Burns so wistfully said, "Oh wad some power the giftie gie us to see oursels as others see us!"

We are particularly interested in the fact that physical appearance is deeply implicated in problems of self-image, since undesirable or undesired physical attributes may well have deleterious effects upon a person. As Dr. Samuel Cohen of the University of Pennsylvania has said, "Personality complexes in individuals with poor facial features occur too frequently to be merely coincidental . . . (and) personality changes for the better, after surgery, occur too often to be coincidental."

We have considerable evidence of both the original causative factor, and of the effects of therapy in such cases. For example, the unattractive child who is the butt of his companions' jokes and domination often bears for long years the resultant emotional scars, yet after surgery, he may readjust dramatically.

It would be extremely interesting to have at hand a special study of the correlation between cosmetic complaints and "psychosomatic" complaints, a correlation which certainly exists. Often, a psychosomatic problem may be masked by the cosmetic complaint. Therefore, this orientation or analytical approach to the factors involved is suggested:

1. Direct or primary factor—existing deformity.
2. Indirect or secondary factor—deformity, real or imagined, secondary to another problem.

If the patient presents only the primary factor of an existing deformity, it is wise to look for the possible existence of other complaints, some of them psychosomatic, which may also be developing, if not already manifest, in the person concerned. These cases will be resolved by the surgery itself, and the resultant readjustment may be predicted with some accuracy. One may notice this especially, in the young, perhaps because the effects of social experience, even on the very sensitive individual, may not yet have caused lasting psychic damage. Immediate and

satisfying social consequences of the surgery may well effect healthy personality changes.

Should the patient present a secondary factor as the reason for a desired change, it becomes necessary to look further for what may be the primary factor. This may be unhappiness due to failure in marriage, career or social adjustment. Here the appearance is secondary to a conflict of some kind, for which the salutary effects of surgery may not alone suffice. Especially in cases where the deformity is more imagined than real, the patient is likely to require psychiatric rather than surgical treatment.

Criteria Offered

When a patient appears for voluntary surgery, it becomes necessary to establish criteria which will determine whether or not surgery is indicated, or whether referral to a psychiatrist for clearance is the proper step to take.

1. Obviously, the patient with a history of mental disorder, who has either been institutionalized or who is under active psychiatric care, raises questions which must be resolved by the practitioner or surgeon. Such a history may not necessarily contraindicate plastic surgery; but the psychiatrist should certainly be consulted.

2. When complaints are inordinate, disproportionate to all physical findings, the patient may require referral or at least direction toward his need for psychiatric opinion.

3. Occasionally we encounter the "surgeophile," who has been seen by other specialists for other surgical complaints as well as the one presented to us. Exceptionally conscious of the body, yet oddly unafraid of surgery, this patient may be gratified by undergoing rather frequent operations of the cosmetic type. Thus this patient may return several times to a surgeon, requesting rhinoplasty, otoplasty, ophthalmoplasty, mammoplasty, etc. Yet this patient may not be a psy-

chiatric problem. In the case of people in business or in the entertainment field, where strong economic considerations are implicit in the kind of appearance presented to the world, cosmetic surgery in all its aspects may be quite satisfactorily rationalized and give little evidence of presenting deep-seated emotional problems. However, those surgerophiles who appear to have a compulsion for multiple operations should be avoided.

4. Other types which the surgeon would do well to turn away are those who bring drawings, photographs, or both, seeking to look exactly as imagined—these are called patients with a fixed future image, and are certain to present the surgeon with many difficulties.

5. The patient who on initial consultation wants to discuss definitive plans not only for operation but for reoperation, anticipating discontent, should be recognized as one who will produce difficulties.

6. Finally, suspected psychiatric patients who refuse suggested psychiatric consultation should be refused surgery.

Postoperative Readjustment

We have briefly discussed the preoperative evaluation of patients, yet there is still a further challenge to the physician, which occurs during the postoperative readjustment period.

The first hurdle comes at the "unveiling" of the new face. Unless he has been told to expect edema and discoloration at his initial view, the patient will be profoundly shocked at his appearance. Especially in cases where spectacular changes are to be expected, the surgeon is aware of the need to forewarn the patient. Some surgeons do not believe in effecting too profound a change in the appearance of patients, yet it is a fact that the great majority of individuals do make excellent readjustments, so that the surgeon consistently attempts to produce the best possible cosmetic results.

Most patients are naturally very sensitive about how they will look after plastic

surgery, and will experience a certain degree of uneasiness within themselves. The surgeon must support and strengthen the patient; reassure him as to how others see him; predict the course of his daily improvement and eventual gratification. Much of this postoperative apprehension does not appear where marked deformities have been corrected. These patients are ready for, indeed anxious for, any improvement. Children, even when previously badly deformed, are usually not apprehensive at all. They want to display the results of the operation and are often playful and happy very shortly after the bandages have been removed.

Frequently, the greatest apprehension has been on the part of the relative, parent or spouse. As the patient usually cares very much about the reaction of these people, the surgeon can be very helpful in the family setting. He must educate

them to realize that cosmetic surgery can be an intense psychological experience, sometimes as swift in effect as "shock" therapy. They require help in realizing that the patient's emotions are deeply affected and that there may be apparent, within a short space of time, a distinct change in personality.

CONCLUSIONS

In practice relatively few severely disturbed patients who volunteer for plastic surgery are seen.

Surgery is extremely helpful in the majority of cases where persons have been hurt socially because of real, not fancied, deformity.

A surgeon or a general practitioner does require certain criteria to help evaluate emotional stability before considering the advisability of surgical intervention.

67 Park Avenue, New York, N. Y.

In reality the overwhelming majority of all medical cases are definitely complicated by a so-called neurosis or a neurotic element, and their need for psychotherapy is so marked that there should be little need for further argument in favor of its being accepted as an absolutely indispensable part of every physician's armamentarium.

Austen Fox Riggs
From *The Riggs Story*,
by Lawrence S. Kubie, M.D.

Mastering Long Term Illness

EDWARD L. BORTZ, M.D.

Long term illness is one of the major challenges facing modern society. This has been drawn into sharper perspective because of the spectacular advances which have been made in many of the acute maladies in the last two decades. While long term illness may occur at any age, the longer individuals live the more likely they are to fall victim to chronic illness.

The most common disorders requiring medical and social services today are diseases of the vascular system including heart disease, high blood pressure, coronary occlusion, apoplexy and generalized arteriosclerosis; second, cancer; third, arthritis and rheumatism; and fourth, nervous and mental disorders. Since breakdown of the blood vessels and cancer account for the loss of about a million lives each year, the need for comprehensive planning to master these common killers is apparent.

Adaptation

Acute illness, while it may temporarily inconvenience an individual, is not of sufficiently long duration to greatly alter his normal way of living. Following the inconvenience and nuisance of temporary inactivity, the patient may return promptly to his former occupation and status. Long term illness, however, as pointed out by Jurgen Ruesch, changes the mode of living itself. It may tax to the utmost all of the resources of the patient. Psychologically, the goals, the beliefs, the interests, the social contacts and daily ways of living must be modified, while the body, physically speaking, is in the throes of the continuing illness.

Physical residues may remain permanently and there is always the memory

trace of the illness which can be a traumatic experience. The physician must plan a long range restoration program for the individual by helping him not only to neutralize and conquer the physical aspect of his experience, but to develop a point of view, a philosophy, that will protect him against traumatic memories that may be a heavy obstacle to returning to a useful way of living. Adaptation to one's problem and the necessity for a utilization of all of the family and community influences in such a way that recovery will be enhanced is an absolute necessity. In fact, it strikes me as important to realize that the unit of study today for the physician must be the family rather than the individual. This gives one a broad approach so that all of the resources of the family may be brought into play.

Adjustments

When a catastrophe strikes an individual his family is affected. Depending upon his livelihood, his social position and interests, and an ever widening group of circumstances may per force be altered. In fact, the way one lives, as Ruesch has pointed out, may be responsible in part for the disease he is going to contract. The personality of an individual plays a role in the way he will react to a given catastrophic experience. It is not surprising therefore to see that recovery from a disease may be related to personality factors of the individual. An aggressive person may over-expose himself to danger; he may also disregard his physician's admonitions and ignore precautions so that as a result convalescence may be unduly prolonged. In fact, there comes to mind several patients whose lives have been snuffed out because of complete disregard of the recommendations for personal safety which were given by the doctor in charge.

From the Lankenau Hospital, Philadelphia, Pa.
Abstract of a paper presented at the Seventh Annual Meeting of the Academy of Psychosomatic Medicine in Philadelphia, Pa., Friday, October 14, 1960.

The type of disorder and the length of time required to bring it under control may completely alter the future program of the patient, change his personality and have far reaching influences on the mode of living and experiences of members of the family who may be dependent upon him. An individual whose major work has to do with moving about will be tremendously influenced by an amputation; an individual who habitually over-indulges in food may be exceedingly unhappy when placed under restrictions for hypertension. The frustrations that are experienced depend in large measure on daily habits, attitudes and motivation. Whether or not an individual can adjust satisfactorily to altered modes of living necessitated by the presence of long debilitating illnesses depends on the individual's ability to face reality.

When the patient is able to surmount and rationalize these situations, indeed they may be stepping stones to more remarkable accomplishments than was formerly possible. One thinks of Edward Trudeau, of Stevenson, of Helen Keller; indeed many individuals have used their obstacles in reaching higher ground.

Jurgen Ruesch emphasizes that the psy-

chological management of the patient is the most essential therapeutic step in planning for recovery. Not only do happiness and the joy of living depend upon freedom from fear and anxiety, but the physical concomitants of anxiety have unfavorable influences on physiological processes. In such a situation the attending physician must be the father confessor, the counselor, the good friend, who allays the fears and anxieties not only of the patient but also of other members of the family. However, if the doctor himself is in the hurried state that many apparently are in today, anxious and impatient, he may lose the optimum opportunity to bring calm and peace of mind to the entire family. The release of tension in a critical situation is probably the most important first job of the family doctor. The patient who is relaxed and confident can face with equanimity even the most dangerous threat to his well being with promise of improvement.

The incentive to recovery may be the determining factor in success or failure. Where there is no will to come back, the physician has a big job on his hands. It becomes a sense of values, of interests, of emotional attitudes which will determine the outcome.

Whatever may be the nature of insanity or our fallacious views regarding it, it is a matter of great consolation to find that our mode of treating it is at last founded on rational and humane principles.

John Gideon Millingen

Curiosities of Medical Experience, 1839.

Notes and Comments

Academy Constitutional Amendment

An amendment to the constitution of the Academy has been proposed by Secretary Bertram B. Moss, M.D.:

"The Executive Council shall be authorized to create a Board of Directors to act between meetings. It shall consist of the six officers of the Academy. The only limitation imposed upon this Board of Directors shall be that any action changing control, administration, or policy shall be considered only at meetings of the entire Executive Committee. If a member of the Board of Directors should become unable to serve, the Executive Committee shall elect from their number, a member to serve on the Board of Directors until the next annual meeting of the Executive Committee."

Academy News Notes

Effective at the next annual meeting of the Academy the costs of daily luncheons and of the Friday evening buffet reception will be included in the membership dues.

New members who have been passed by the Membership and Credentials Committee will be voted on by the membership at large before being accepted by the Executive Committee. Membership certificates have been revised in format and will be sent out as soon as possible to those already accepted. New members will receive their certificates at the meeting.

Please notify the Secretary, Bertram B. Moss, M.D., 55 E. Washington St., Chicago, Ill., if you desire to work on any particular committee.

LOUIS JOEL FEIT, M.D., of New York Poly-clinic Hospital and Medical School, and president-elect of the American Otorhinologic Society for Plastic Surgery, reported on otoplasty in a scientific exhibit at the clinical meeting of the American Medical Association held in Washington, D.C.

WILFRED DORFMAN, M.D., spoke before the Wisconsin Academy of General Practice and the Department of General Practice at St. Luke's Hospital, Milwaukee, Wis., on January 7, 1961. His topic was the "Psychosomatic Aspects of Obesity."

BERTRAM B. MOSS, M.D., addressed the same groups on January 21, 1961. He spoke on "Psychosomatic Problems in General Practice."

LEO WOLLMAN, M.D., of Brooklyn, was elected to Fellowship in the N. Y. Academy of Sciences. He addressed the N. Y. Society of Clinical Hypnosis in Albany, N. Y., on "Frigidity and Impotence."

DAVID C. COLLINS, M.D., of Los Angeles,

California, is President-elect, American Academy of Applied Nutrition and is Secretary of the International College of Applied Nutrition.

LEON S. HIRSCH, M.D., of Cincinnati, Ohio, was a recent medical expert for the Food and Drug Administration at the U.S. District Court, Chicago, Ill.

EDWARD PODOLSKY, M.D., of Brooklyn, has inaugurated a new research program at Coney Island Hospital which is attempting to evaluate the frequency of depressive episodes in women during the ante-partum period.

ALVIN F. GOLDFARB, M.D., of Philadelphia, will speak on "Premenstrual Tension," before the Indiana Academy of General Practice in Indianapolis on March 15th. He will have an exhibit on "Reproductive Failure" at the meeting of the American College of Obstetrics & Gynecology in April 1961 at Miami Beach.

BERNARD B. RAGINSKY, M.D., of Montreal, a past-president of the Academy of Psychosomatic Medicine, and one of its founders, has been appointed chairman of the Special Committee on Hypnosis of the Canadian Medical Association. Any Canadian member of the Academy interested in hypnosis, who may have information of interest to this committee, should write to Dr. Raginsky at 376 Redfern Avenue, Montreal 6, Quebec.

EUGENE J. ROGERS, M.D., of Brooklyn, N. Y., published "Treatment of Muscle Spasm with Physical Therapy and a Central Relaxant" in the *New York State Journal of Medicine* (Jan. 1, 1961).

MELVIN LAND, D.D.S., was re-elected President of the Dallas Section of the American Society of Clinical Hypnosis.

Academy Committee Chairmen 1960-61

Annual Awards: Maury D. Sanger, M.D., 1601 Ditmas Ave., Brooklyn 26, N. Y.

Annual Program: George F. Sutherland, M.D., 3700 North Charles St., Baltimore 18, Md., and Frank J. Ayd, Jr., M.D., 6231 York Rd., Baltimore 12, Md.

Auditing: Zale Yanof, M.D., 2282 Ashland Ave., Toledo 10, Ohio.

Credentials: Arthur N. Foxe, M.D., 9 East 67th St., New York 21, N. Y.

Constitution and By-Laws: M. Murray Peshkin, M.D., 450 West End Ave., New York, N. Y.

Convention Coordination: Bertram B. Moss, M.D., 55 E. Washington St., Chicago 2, Ill.

Convention Entertainment: Harry Goldman, M.D., 2326 Eutaw Pl., Baltimore 17, Md.

Convention Exhibits: Frank J. Ayd, Jr., M.D.,

6231 York Rd., Baltimore 12, Md., and Jerome Miller, M.D., 1930 Pine St., Philadelphia 3, Pa.

Convention Recording: Milton H. Cohen, M.D., 67 Chestnut St., Lewistown, Pa.

Convention Registration: Henry Heller, M.D., 3653 West Lawrence, Chicago 25, Ill.

International: James L. McCartney, M.D., 223 Steward Ave., Garden City, N. Y.

Membership: Max Koenigsberg, M.D., 1123 Virginia St. East, Charleston, W. Va.

Nominating: George Sutherland, M.D., 3700 North Charles St., Baltimore 18, Md., and Maury Sanger, M.D., 1601 Ditmas Ave., Brooklyn 26, N. Y.

Past President Honor: Ethan Allan Brown, M.D., 75 Bay State Rd., Boston 15, Mass.

Publications: Robert Rutherford, M.D., 707 Broadway, Seattle 22, Wash.

Public Relations: Wilfred Dorfman, M.D., 1921 Newkirk Ave., Brooklyn 26, N. Y.

Psychosomatics: Wilfred Dorfman, M.D., 1921 Newkirk Ave., Brooklyn 26, N. Y.

Regional Areas Coordination: Kenneth W. Teich, M.D., 801 Med. Arts Building, Duluth, Minn.

A.A.G.P. Liaison: I. Phillips Frohman, M.D., 2924 Nichols Ave. SE, Washington 20, D.C.

A.D.A. Liaison: Melvin Land, D.D.S., 2623 Abrams Rd., Dallas 14, Texas.

A.M.A. Liaison: Lawrence Weiss, M.D., 5579 North Park Ave., Philadelphia 41, Pa.

A.P.A. Liaison: P. J. Sparer, M.D., U. of Tenn. Coll. Med., 42 North Dunlop St., Memphis 7, Tenn.

Meetings of Interest

A one day Institute in "Child Psychiatry and the General Practitioner" is scheduled for April 19, 1961 in Plattsburgh, N. Y. It is sponsored by the Plattsburgh Child Guidance Clinic, The New York State Department of Mental Hygiene, The Clinton County Medical Society, The Champlain Valley Hospital School of Nursing, the State University College of Education at Plattsburgh, as well as the Academy of Psychosomatic Medicine. It has been approved for seven hours of Category I credit by the Academy of General Practice. The speakers include Edward Redcay, Ph.D., Dean of the College of Education; Donald W. Cohen, M.D., Chief Child Guidance Psychiatrist, New York State Department of Mental Hygiene; Adam J. Krakowski, M.D., of the Plattsburgh Child Guidance Clinic; Isabella S. R. Ralph, M.D., Binghamton State Hospital; J. Preston Robb, M.D., of McGill University, Montreal; Ludwig Fink, M.D., and W. Cecil Johnston, M.D., of Dannemora State Hospital; Taylor Statton, M.D., Director of the Department of Psychiatry, Montreal Children's Hospital; and R. J.

McKay, Jr., M.D., Professor and Chairman, Department of Pediatrics, University of Vermont. For further information write to Adam J. Krakowski, M.D., Plattsburgh Child Guidance Clinic, New York State Department of Mental Hygiene, 202 Cornelia St., Plattsburgh, N. Y.

Other meetings in the near future include:

March 12-17: American College of Allergists; Statler Hilton Hotel, Dallas, Texas.

March 22: Association for Advancement of Psychoanalysis, Karen Horney Memorial Lecture; New York Academy of Medicine.

March 22-24: American Society of Group Psychotherapy and Psychodrama, Barbizon Plaza Hotel, New York, N. Y.

March 23-25: American Orthopsychiatric Association, Statler Hilton Hotel, New York, N. Y.

April 4-11: Caribbean Conference for Mental Health, Univ. College, Mona, Jamaica. Inquire: Dr. Cooke, Bellevue Hospital, Kingston, Jamaica, B.W.I.

April 5-7: National Conference on Alcoholism, Shoreham Hotel, Washington, D.C.

April 13-16: Group for the Advancement of Psychiatry, Hotel Berkeley Cartaret, Asbury Park, N. J.

April 24-29: American Academy of Neurology, Sheraton Cadillac Hotel, Detroit, Michigan.

April 26: Association for the Advancement of Psychoanalysis, Karen Horney Clinic Building, 329 East 62nd St., New York, N. Y.

April 28-30: American Psychosomatic Society, Atlantic City, N. J. Inquire: 265 Nassau Rd., Roosevelt, New York.

May 1-13: The Lindauer Psychotherapy Weeks, Lindau, Germany; contact Mr. Jacques Brachfeld, Prisco Bureau, 1 DeKalb Ave., Brooklyn, N. Y.

May 2-6: American Association on Mental Deficiency, Netherland Hilton Hotel, Cincinnati, Ohio. Inquire: Dr. Dayton, Box 51, Mansfield Depot, Conn.

May 5-8: American Psychoanalytic Association, Palmer House, Chicago, Ill.

May 6-7: Academy of Psychoanalysis, Hotel LaSalle, Chicago, Ill.

May 7: American Ontoanalytic Association, Chicago, Ill.

May 7: American Society of Medical Psychiatry, Morrison Hotel, Chicago, Ill.

May 8-12: American College of Physicians, Americana Hotel, Miami Beach, Fla.

May 8-12: American Psychiatric Assn., Morrison Hotel, Chicago, Ill.

June 4-10: The Third World Congress on Psychiatry, McGill University, Montreal, Canada.

June 19-23: Psychiatry for the Internist, University of Colorado, Denver, Colo.

August 21-26: Vienna Congress on Psychotherapy; contact Mr. Jacques Brachfeld, Prisco Bureau, 1 DeKalb Ave., Brooklyn, N. Y.

Vitamins: Realizations and Limitations

Had I my youngsters' vitamins,
 Life could be filled with might 'a' beens.
 With "A" my skin would have been softer,
 Night-sight better, late speers offer.
 Had I "B-1" my nerves somehow,
 Might manage without Miltown now.
 With "C"—on all my dinner dates
 I could dispense with upper plates.
 "D" would assure a better gait,—
 My bowlegs could have turned out straight.
 "E's" help to muscular contraction
 Might cure my lazy, tired inaction.
 With "K" to help "klotting" succeed,
 No sorrows need make my heart bleed.
 With "P" at least, so I've been told,
 I'd suffer less from the common cold.
 With A to Z, from Z to A
 I could be better every way,
 In every crisis know my cue
 Because of an improved I.Q.
 Chock-full of vitamins I'd be
 A strong, better, healthier me.

Watching this generation grow
 I sometimes wonder if it's so.
 Since they get vitamins each day
 They should excel in every way.
 But oft a miss, I must admit,
 Has to be buoyed to be a hit.
 And boys form a depressing list,
 So mothered they'd never be missed.
 As they mature then, you may find
 The body outperforms the mind.
 At twelve the full grown body strains
 To act eighteen, with twelve years brains!
 And if some youngsters seem mature,
 They're frightened too, and insecure,—
 Unknowing how high nature's price is,
 They copy all their elders' vices.
 Impatient of the years between,
 The twelve year old must play eighteen.
 Character building loses meaning,
 When twelves and thirteens start eighteening.
 I'd rather youngsters grew less quickly,
 With bodies average, minds less sickly.
 For what might be—don't care a tittle
 Too much can be worse than too little.

Tho' vitamins in foods or pills
 Prevent or cure so many ills,
 No formula, that may be bought,
 Can guarantee fine wholesome thought—
 Ideals and goals that men live for,
 Are not for sale at any store.

SAM SILBER, M.D.
 Brooklyn, N. Y.

Abstracted from the Medical Press

MIGRAINE HEADACHE — ITS PHYSIOLOGY AND BIOCHEMISTRY. Adrian M. Ostfeld, M.D., J.A.M.A., Oct. 29, 1960.

With 10% of the United States' population exhibiting the syndrome: periodic recurrent and one-sided headache, commonly associated with anorexia and nausea, the physiology and biochemistry of migraine becomes most important in order to understand the proper approach.

Physiologically, there is vasodilation in extracranial arteries, arterioles, venules, and possibly veins. The superficial temporal, supraorbital, posterior auricular and occipital arteries, unlike the intracranial arteries, have a thick muscular coat. These arteries supply the skin and subcutaneous tissues of the forehead, scalp and back of the head as well as the musculature of the scalp and forehead. The vasodilation is brought about by one or both of two neural pathways. Cholinergic vasodilator fibers in the facial nerve supply the facial, superficial temporal, maxillary, lingual and posterior auricular arteries. Sensory innervation is supplied by the trigeminal nerve and sympathetic fibers.

There is real vasomotor regulatory deficit in persons subject to migraine attacks. The perception by the cerebral cortex of threatening life situations seems to initiate the chain of neurovascular events that results in headache. Two pathophysiological events that must occur concomitantly to induce headache, are cranial artery dilatation and local tissue changes produced by arteriolar dilation, edema and tenderness. The mechanism of local tissue changes is brought about by the release of acetylcholine, adenosine triphosphate, bradykinin, histamine and serotonin.

Two rational methods used to alleviate the migraine attacks are the use of vasoconstrictor agents such as ergotamine tartrate to reduce the size of dilated arteries and arterioles and the use of agents to prevent the liberation of or antagonize the effects of the headache substance: antiserotonin therapy.

The tranquilizers have proved of little value in migraine. For prevention of the migraine attack, the simplest and most effective remedy is still the sympathetic relationship existing between the understanding physician and the troubled patient. Two out of three patients can be greatly helped by the helpful attitude of the understanding physician who attempts to have the patient recognize those factors in his life that may be causing him to go in the wrong direction or at the wrong pace.

Sidney B. Callis, M.D.
Wellfleet, Mass.

THE LANGUAGE OF THE HOSPITAL AND ITS EFFECTS ON THE PATIENT. A. T. Baziak and R. K. Dentan. A Review of Gen. Semantics, 17: 3, Sept. 1960.

A hospital is a relatively isolated subculture in which roles are strictly defined. The authors contend that because of linguistic and cultural conditioning, the doctors and nurses tend to perceive only certain features of the patient's condition, and to ignore the idiosyncratic features of the patient's problem. Because of their training, most doctors consider the patient as a carrier of symptoms and they perceive and react to symptoms instead of to patients. Patients become objects on which orders are carried out and depersonalization may be carried to the extent of referring to a patient as a room number or a symptom. Several examples of this type of behavior are given. The authors feel that the inappropriate behavior of attendants results from the conditioning of the subculture and the language which the subculture uses; that such behavior inhibits the avowed function of the hospital—the meeting of the physical and emotional needs of the sick.

F. W. Goodrich, Jr., M.D.

LEARNED BEHAVIOR OF RHESUS MONKEYS FOLLOWING NEONATAL BILATERAL PREFRONTAL LOBOTOMY. K. Akert, O. S. Orth, H. F. Harlow and K. A. Schiltz, Science, 132: 1944, 1960.

Whereas bilateral ablation of the dorsolateral frontal cortex in the adolescent or adult rhesus monkey produces a severe deficit in crucial tests of response and discriminative learning, such an operation performed in the newborn fails to produce such an effect. This study extends the evidence that described the cerebral cortex as a genetically determined matrix upon which trial and error experiences construct a built-in or acquired program of information in the "computer" sense. The fact that no learning deficit results from early ablation of frontal cortical substance demonstrates the economy of this structure. In addition, multiple utilization of the same components in many circuits may be possible. If one imagines the brain as having a neural network with a finite number of interstices and an almost infinite number of separate pathways, normal function may still be envisaged even after large segments of the matrix are cut away, since more than enough pathways are provided. However, when such ablation is performed during the adult stage, reduced activity

is expected, in as much as some degree of interference with the total interlacing pattern of pathways, programmed by previous experience, is to be anticipated.

Milton Gross, Ph.D.

NEW HORIZONS IN PSYCHIATRIC HOSPITALIZATION. Lauren S. Smith, M.D., J.A.M.A., 174 (11):126, November 12, 1960.

The author states that the primary significant factor in successful treatment of the patient is the "doctor-patient relationship"; that the general practitioners are moving closer to comfortable adequacy in dealing with some psychiatric problems. Dr. Smith feels that psychiatric hospital care should be available quickly and locally rather than be restricted to isolated private hospitals, state hospitals or veteran administration facilities. He feels that closed staff policies are no longer adequate. The true value in therapy is the personal contact of doctor and patient. This necessitates that patients be provided the fullest continuous therapeutic contact with their own physician rather than be referred to an institution with a closed staff.

Bertram B. Moss, M.D.

EMOTIONAL FACTORS IN PRIMARY GLAUCOMA. Carl N. Zimet, Ph.D., and Allan S. Berger, M.D., *Psychosomatic Med.*, 22:391-399, 1960.

Emotional factors in primary glaucoma were studied through the use of the Minnesota Multiphasic Personality Inventory and the Draw-a-Person test. These were administered to 19 patients with primary glaucoma and to 16 patients with other non-glaucomatous eye diseases, matched as to age, sex, race, socioeconomic class, chronicity of eye disease and degree of visual impairment. The purpose of this study was to make a comparison between the glaucoma and the control patients and to check between those with minimal and major visual impairment regardless of the diagnosis. There were no significant differences between the glaucoma and control patients but when a comparison was made between those with marked and those with minimal visual impairment, it was found that the M.M.P.I. scales pointed to greater pathology in the minimally than in the maximally impaired group. Also when seven glaucoma patients with high intraocular pressure were compared with ten glaucoma patients with low intraocular pressure, those patients with low pressure appeared more disturbed on the M.M.P.I. than those with high intraocular pressure.

T. F. Schlaegel, Jr., M.D.

HYPOGLYCEMIA IN PATIENT WITH CHRONIC MYELOCYTIC LEUKEMIA. *Clinicopathologic Conference, Roswell Park Memorial Institute, Buffalo, New York.* Conducted by E. R. Studenski, M.D. Discussed by Robert Tarail, M.D., September 19, 1959. *N. Y. State J. Med.*, Nov. 1, 1960, pp. 3433-3440.

This clinicopathologic conference is most instructive. The patient's presenting complaints were fatigue, loss of ambition and bouts of sweating. Since these are so similar to many of the psychosomatic complaints of most of the neurasthenic patients one may see in clinical practice, it remained for the laboratory to diagnose the presence of chronic myelocytic leukemia. The patient, after adequate laboratory work-up, showed many of the stigmata that one sees in hyperinsulinism. The changes in the affect of the individual subject to hypoglycemia may be so marked that occasionally disorientation may occur associated with a definite abnormal psychiatric behavior. It is important that organic reasons for such abnormal behavior should be looked for, particularly if the episodes occur at certain prescribed times during the day when hypoglycemia would tend to be rampant.

The following classification of causes of hypoglycemia was listed by the discussor:

- 1) Overdose of insulin or other hypoglycemic agents; 2) Organic hyperinsulinism associated with adenoma, carcinoma, or hyperplasia of islets of Langerhans; 3) Hepatic; 4) Hypofunction of anterior pituitary; 5) Adrenocortical insufficiency; 6) Lesions of central nervous system; 7) Functional hypoglycemia or hyperinsulinism; 8) Alimentary disturbance ("dumping syndrome"); 9) Renal glycosuria; 10) Extreme muscular work; 11) Factitious use of hypoglycemic agents; 12) Inanition, starvation; 13) Tumors; 14) Unknown (including "idiopathic" hypoglycemias in infancy and childhood.

It is interesting that on autopsy the patient showed evidence of brain damage and hemorrhage in the hypothalamic area which may have been responsible for that region of the brain inducing release of insulin. Thus, organic lesions other than that associated directly with pancreatic function may result in hypoglycemia bringing about behavior patterns comparable to that seen in the neurasthenic individual.

Herbert S. Kupperman, M.D.

ARCHAIC PERSONALITY STRUCTURE OF ALCOHOLICS AND IMPLICATIONS FOR GROUP THERAPY. Charlotte Feibel, *Int. J. Group Psychother.*, 10/7:39-46, January 1960.

Group therapy is the treatment of choice for the alcoholic who comes to the attention of the

physician. In establishing the rationale for this recommendation the author points out that in the case of the alcoholic, development seems to be fixated at an archaic ego level. Describing their character structure, the author first points out that their essential difference from psychotics lies in the fact that they have not relinquished the struggle for reality. Regardless of their intellectual level, she sees in alcoholics certain common features: 1) tendency toward regression rather than repression, 2) denial of unpleasant realities. Whereas a normal ego represses unacceptable drives into the unconscious, an alcoholic's archaic ego causes him to fall back to early childhood in which he abandons himself to instinctual urges, seeking pleasure at any price. Denial can at best achieve no more than prevent ideas which have reached the preconscious from becoming conscious; this implies that denial tends to affect the thought process, to interfere with logical thinking. One may speculate as to whether the well-known alcoholic blackout and certain other forms of acting out are not denial in a particularly massive form.

The advantages of group therapy as practiced in the Consultation Clinic for Alcoholism, New York University-Bellevue Medical Center, are described. This method takes into account the ego limitations and defects of the patient and attempts to correlate the primitive defense mechanism with the archaic structure. The main goal is to strengthen the ego. The intensity of transference encountered in individual therapy might be unbearable, but the presence of the group seems to dilute the transference for each individual. The interpretations given in the group diminish the social fears because its members are working together toward a common goal. The therapist's concept of the archaic ego enables him to show the patients that they are reacting in the framework of the past; he encourages a maturing process so that tensions are no longer perceived to be threatening.

Elizabeth Thoma, Ph.D.

CHARACTERISTICS OF SMOKERS COMPARED WITH NON-SMOKERS IN A POPULATION OF HEALTHY YOUNG ADULTS. Caroline Bedell Thomas, M.D., *Ann. of Int. Med.*, 53/4:697-718, October 1960.

The study is an attempt to compare smokers with non-smokers, employing multiple parameters, with the aim of discovering whether or not there are basic physiologic and psychologic constitutional differences between the two groups. Ten successive classes of Johns Hopkins Medical students were studied in detail. The subject

group included 657 subjects, of whom 597 were men and 60 were women.

Smokers, in general, are more likely to have hypertensive parents, to manifest higher blood cholesterol levels, to be heavier, and to exhibit higher mean recumbent values for heart rate and blood pressure. Rorschach tests, as well as more direct interview and questionnaire techniques, indicate also that smokers are more likely to express hostility and show a greater tendency to eat when under stress.

An impressive number of areas were found in which there were no significant differences in the two groups. These included response of blood pressure and heart rate to cold pressor tests, double Master exercise test, and ballistocardiographic smoking test. There was no difference in academic excellence. Most of the Rorschach variables, such as productivity, constriction, proportion of whole, detailed and very detailed responses, and distribution of color responses, showed no significant variation.

The study, which is to be amplified in the future, is not yet conclusive in determining whether the differences found between smokers and non-smokers represent true constitutional factors or are due to the effects of smoking. Variations in parental history, however, suggest that smokers and non-smokers have a somewhat divergent heritage and that some of the differential factors may be genetic in origin.

Sanford M. Lewis, M.D.

PHANTOM ORGASM IN THE DREAMS OF PARAPLEGIC MEN AND WOMEN. John Money, Ph.D., *Arch. of Gen. Psychiat.*, 3/4, Oct. 1960.

The author studied fourteen male and seven female paraplegics. Two cases are presented in detail. Reviewing the literature, the author relates that erection, ejaculation and fertility are experienced in certain male paraplegics. Menstruation continues and gestation has occurred in the female paraplegic.

The author studied the effect of the spinal injury on body sensation, sex function and erotic fantasies and dreams. These patients suffered in common the loss of feelings of sexual urge and gratification which was present before the injury. The content of their sex fantasies and dreams was not significantly different from what it was prior to the injury. Dreams of sexual intercourse, locomotion and cure recall the past and deny the existence of paralysis. That some have orgasmic dreams is significant. This indicates that erotic fantasies can be independent of genital sensation—that brain and genitalia work independently in the paraplegic.

George J. Train, M.D.

THE DIFFICULT PATIENT. Ian Skottowe, M.D., Brit. Dent. J., 108-12, 425, June 21, 1960.

The author, in discussing the "difficult patient," mentions the fact that in this area we are right in the middle of interpersonal relationships. The interaction of the doctor's personality and that of the patient is like a two-way street and the nature of this interaction can affect the ultimate outcome of his treatment. In order to better understand and cope with the emotionally difficult patient, Dr. Skottowe places them all in five categories.

1. **Proneness to anxiety**—the timid patient. This type responds to emotional stress viscerally, does not tolerate pain well and will show signs of over-activity of the adreno-sympathetic mechanism.

2. **Hysterical proclivities**—the histrionic patient, is inclined to act out what he thinks is wrong with him. There is a need to save face, evade responsibility and gain attention or affection.

3. **Obsessionalism**—this fussy patient can prove to be a very difficult denture patient, hard to satisfy and is morbidly preoccupied with his mouth.

4. **Paranoid proclivities**—the litigious patient. They are difficult to treat in any phase of medicine, and if things go wrong they don't hesitate to accuse or seek restitution.

5. **Aggressive proclivities**—the tough patient. Men in this group must prove their physical prowess and claim they can "take it." Often, deep down, they are quite frightened. In dealing with this type the doctor's attitude is of great importance.

Frankness with one self, knowing what you are trying to do, and intelligent communication with the patient will contribute toward a successful, professional relationship.

Melvin Land, D.D.S.

PSYCHOTHERAPY OF PARENTS OF ALLERGIC CHILDREN. Hyman Miller, M.D., and Dorothy Baruch, Ph.D., Ann. of Allergy, 18/9:990-97.

This paper discusses the emotional relationship between parents and their allergic children. The author states that the allergic child characteristically blocks the normal hostility all children feel at times towards their parents. The child internalizes his anger and this results in allergic symptomatology. Following therapy of the parents as well as the allergic child, it is found that when the child feels safe in telling his parents about his hostile feelings, there is a decrease in symptoms.

Several case histories revealed the emotional problems of the parents as factors in precipitat-

ing and maintaining the allergic state of the child. The parents' fantasies equate their own child with one of their own parents, or siblings, causing ambivalent feelings, associated with hostility and guilt, in both the parents and the allergic child.

With increasing insight, the parents learn to give up the child as part of themselves or as an image of their own parents. The child, if permitted to grow, will no longer need the allergic symptoms to serve mutually destructive purposes and can then make better use of his allergic treatment to get well.

Maury D. Sanger, M.D.

FRIGIDITY. Edward C. Mann, M.D., Clin. Obs. & Gyn., 3:3, Sept. 1960.

"The capacity of the human female to respond sexually" depends on the interaction of three complex activator systems.

The endocrine factors are least important in the human and their function is mainly one of assuring maturation of the sex organs. Libido or primary sexual urge is relatively unaffected by gonadal hormones.

Somesthetic stimuli originating in end organ receptors activate the sexual urge. This is indicated by the eventual loss of this urge in paraplegics.

Psychic factors, which include acceptance of the erotic role, anticipatory and participatory sexual excitation, and sexual inhibitions on conscious and unconscious levels are of paramount importance.

For effective therapy, modification of psychic impediments must be accomplished. When difficulties are deep seated, psychiatric referral may be necessary but many patients may be treated by the non-psychiatrist. Often frigidity may be a matter of "unadjustment" rather than maladjustment. Husband and wife should be seen separately and the obstetrician, because of his relationship to the couple as a unit may be able to guide them into a more satisfactory relationship.

The author, writing with a background of psychiatry as well as obstetrics and gynecology, is to be commended on a clear and complete exposition of this common problem. The paper should be read in its entirety.

F. W. Goodrich, Jr., M.D.

A BIOLOGIST EXAMINES THE MIND AND BEHAVIOR. Seymour S. Kety, Science, 132:1961-1970, 1960.

This is an excellent review of current physiological concepts of behavior mechanisms.

Recent approaches to the study of consciousness have been by means of 1) the psychophar-

macologic action of drugs on behavior, 2) the mental states and particular sensations evoked from direct stimulation of specific areas of the cortex (Penfield), 3) the correlation between sleep and wakefulness in terms of electroencephalographic activity, 4) the study of the anatomical and pathological basis of coma in relation to brain regions essential for the maintenance of consciousness, 5) the determination of metabolic requirements and energy equivalents of consciousness.

The possibility of predictability is the main value of the mechanistic approach. Mechanical designs of the brain have borrowed heavily from contemporary technological developments. From the earliest crude electrical models to the incorporation of cybernetics, computer and information theory (which themselves originated from efforts to understand the brain), a conceptional framework is provided by electronics which permits us to test basic concepts of brain structure in working models that can perform useful functions.

The cerebral cortex represents a great network of ramifying pathways and interstices, where storage, comparison and coding of impulses can occur. Wakefulness, attention, and affect are explained neurophysiologically, as depending on the activity of a central reticular formation. This is a longitudinal network of neurons which is strategically placed to provide automatic control of many functional systems, such as cyclic, rhythmic behavior. It would appear that "the anatomical substrate of consciousness" resides here. This is supported by the fact that damage to this area is most frequently associated with unconsciousness. Anesthetic agents function at this level and prevent the intrusion into consciousness of painful stimuli. The phenomena of alertness as well as hypnosis may derive from the selective activity of this system. A physiologic explanation of emotional behavior is emerging from studies of the limbic system, which corresponds to the rhinencephalon or "nose-brain" and is intimately associated with the reticular formation, the neocortex and the hypothalamus. These help explain the interrelation of the endocrine and autonomic nervous systems with emotions.

Important contributions from neurochemistry permit further extension of mechanistic interpretations of behavior. The earliest enzymatic studies demonstrated that the brain differed biochemically from muscle and liver, that it had an extremely high metabolic rate, and that carbohydrate was its main energy source. There appears to be an intimate correlation between the over-all oxygen consumption of the brain and the mental state. Interference with function, either by circulatory or through some metabolic

blockade within the brain itself, (such as in uncontrolled diabetes), is correlated with a progressively decreased cerebral oxygen consumption. Conversely, those mental conditions associated with hyperactivity, such as anxiety, demonstrate a significant increase in oxygen utilization. There are, however, a large number of situations in which little change in the rate of oxygen consumption is seen. Neurochemistry is beginning to demonstrate that local concentrations of important neurohumoral substances such as acetylcholine, nor-epinephrine, histamine, gamma-aminobutyric acid, and serotonin vary in relation to behavioral changes. The preferential distribution of these substances in different areas of the brain, and the correlation between changes in their concentration, even down to the level of individual neurons, suggests an important role in relation to changes in behavior and their control.

Even though we may believe that "physics and chemistry and their biological sciences become the real sciences of behavior, while disciplines like psychology, sociology and psychoanalysis become merely empirical, descriptive and are tolerated as a sort of "what to do" until the biophysicist or the biochemist arrives . . . the anecdotal, biased, and selected pathway, which the psychoanalyst prepares, may be the closest approximation we have to the almost inexhaustable fund of information reposing in the individual human brain, which, to a significant extent, determines individual behavior. . . .

There is no hierarchy of the scientific disciplines except with respect to their relevance to particular problems. Each, alone, will never be able to unravel the complex problems presented. "It is the problem of the sciences of behavior to develop techniques for the study of multivariant processes. . . . A truer picture of the nervous system and behavior will emerge from its study by a variety of disciplines and techniques, each with its own virtues and its own peculiar limitations."

Milton Gross, Ph.D.

SCHOOL CHARACTERISTICS OF MALE ADOLESCENTS WHO LATER BECAME SCHIZOPHRENIC. E. M. Bower, T. A. Shellhauner, J. M. Dailey, *Am. J. of Orthopsychiat.*, 30 (4): 712-728.

In this well controlled and documented study the authors conclude that there is a significant difference between the control group selected at random (from the same school environment) and those who later became schizophrenic. The distinguishing factor in the latter group consisted of lesser interest in girls, group activities, athletics and leadership skills, but greater degree

of submission, anxiety, dependence and carelessness. They were not seen as being emotionally disturbed or viewed as behavior problems but in most cases they were withdrawn, less liked by peers and showed poorer achievement than the control group.

Adam J. Krakowski, M.D.

THE GERIATRIC PATIENT IN A MENTAL HOSPITAL: AN APPROACH TO DEFINITIVE MANAGEMENT. Adolf Haas, M.D., J. Amer. Geriat. Soc., Vol. VIII, No. 12, pp. 905-908, Dec. 1960.

The emotional problems of geriatric patients have become increasingly important, both in psychiatric and general practice. As stated in this article, "With prolongation of life for old persons who no longer have a place in our commercially productive society, this problem is acquiring crucial importance." The author goes on to state: "The incompatibility of a senseless existence and a long physical life becomes most pronounced in the mentally ill patient." Dr. Haas states that in all mental institutions, about 33 per cent of the patients on the wards for chronic illness are in the geriatric group, and that this percentage increases parallel to the number of chronic cases in the institution. It is very evident that specialized institutions for this type of patient need to be established. The apparent lethargy of the older person is due to something more than simple old age; besides cerebral impairment it may be a response to lifelong stress. The author emphasizes that geriatric patients should be placed in a separate group from other individuals so that they may continue a life comparable to that pursued by people of their own age in the general population. They should live with compatible geriatric patients, whose ideas and experiences they can share, and with whom they can communicate meaningfully.

James L. McCartney, M.D.

THE GENERAL PRACTITIONER AND THE PSYCHIATRIC REFERRAL. Frank Orland, M.D., Med. Times, Vol. 88 (12):1427, December, 1960.

The author stresses the need for a successful effective communication between the family physician, the patient and the psychiatrist. When making the referral, the physician has to deal with problems within himself, fears within the patient, and successful communication with the psychiatrist. Dr. Orland states that the family physician cannot always decide as to whether the patient needs psychiatric help and feels it would be valuable to refer the patient for one or two consultative interviews. Besides giving the referring physician some needed information, the consultation gives the patient an opportunity to

see what the psychiatrist is like. This can pave the way for possible future therapy with the psychiatrist if the need arises.

Bertram B. Moss, M.D.

DRUG ACTION AND PSYCHOLOGICAL FUNCTION. Mark D. Altschule, M.D., J. of Neuro-psychiat., 2/2:71-75, December 1960.

The author believes that beneficial effects of drugs on mental disorders are caused by chemical changes within the organism. The chemistry of tranquilizing effects is discussed. A useful group of testable hypotheses are presented. The author concerns himself with the following:

1. Depletion of stores of epinephrine (and also, norepinephrine, their precursor dopamine and serotonin). The reserpine group of compounds depletes epinephrine. Apparently, by depleting the body stores of epinephrine, anxiety is reduced. The depletion of epinephrine decreases the formation of indoles from epinephrine.

2. Increased rate of oxidation of epinephrine (and norepinephrine). Phenothiazines and reserpine have this effect; the mechanism is unknown.

3. Chelation of epinephrine (and norepinephrine). The phenothiazines chelate the sympathomimetic amines, as is shown clinically, for example, by the frequency with which they cause hypotension.

4. Depression of the ascending reticular activating system. Reserpine, the phenothiazines, and meprobamate depress the ascending reticular activating system. The latter does not depress the posterior part. The ascending reticular system is rich in epinephrine and norepinephrine. Depression of this system may inactivate these substances.

5. Inactivation of conditioned responses. Reserpine, the phenothiazines and meprobamate inactivate conditioned responses without inhibiting avoidance responses to noxious stimuli.

6. Combination with indoles. The phenothiazines cause an increase in plasma ceruloplasmin concentration (and of course plasma copper content). Ceruloplasmin binds indoles, some, like adrenolutin, irreversibly. Some believe that circulating indoles derived from epinephrine or its precursors, cause some or most of the manifestations of schizophrenia.

7. Competitive inhibition of indoles. Reserpine and the phenothiazines have chemical structures which suggest that these compounds might prevent the action of indoles or their derivatives by pre-empting binding-sites on brain proteins. This effect, if it occurs, is due to similarities in chemical structure.

With this group of suppositions, the author shows us how the new chemical knowledge may help us to understand behavioral pathology. There is an inexorable movement forward in this direction. For example, the psychotomimetic in-doles which are being studied at this time are a tool of great promise for future experiments.

Theodore Rothman, M.D.

PROLONGED USE OF SODIUM LIOTHYRONINE: EFFECTS ON THYROIDAL PARAMETERS AND SYMPTOMS. Samuel U. Greenberg, M.D., and Winifred C. Loughlin, M.D., N. Y. State Med. Jour., Nov. 1, 1960, pp. 3403-3408.

The authors mention their experience with crystalline thyroid compounds, particularly sodium liothyronine. Among the things they noted was that administration of this drug would diminish the protein bound iodine rather than enhance it. They also purported to show that the hypometabolic syndrome was not well established according to their criteria. Since the word hypometabolism implies that there is an unavailability of thyroid substance for utilization at the peripheral level, I do not feel the authors have adequately qualified their diagnosis. Hypometabolism would be manifested by a symptom complex of hypothyroidism with the laboratory findings of a high cholesterol, a flat glucose tolerance, and a normal protein bound iodine and radioactive iodine. The basal metabolism would also be low. In contrast, hypothyroidism shows diminished thyroid activity in all the parameters listed above. Unless the hypometabolic syndrome has been diagnosed precisely, obviously these patients will respond better to psychic stimulants. Appropriate diagnosis is paramount. The authors bring out a point which is well worth while to emphasize. The protein bound iodine, instead of increasing with sodium liothyronine therapy, is diminished. While they do not attempt to explain why this occurs, it appears that the amount of iodine in the sodium liothyronine is so small, plus the fact that so little of it is combined to protein, that no elevation of the protein bound iodine occurs as would be anticipated after therapy with thyroxine or thyroid itself.

Herbert S. Kupperman, M.D.

INVOLVEMENT OF THE CENTRAL NERVOUS SYSTEM IN INFANTS WITH SCHIZOPHRENIA. B. Fish, Arch. Neurol., 2:2:115-121, 1960.

The poor muscle tone, uneven growth (with periods of retardation and unusual acceleration) and poor proprioception suggest a disturbance in the function of the hypothalamus and reticular system. As a result, irregular intellectual growth and perceptual disturbances appear as the child

increases in age. The deficiencies in the CNS produce poor integration of neurological development, a weakened ego, anxiety and perceptual distortions. The author states there is no fixed neurological defect, but instead there is a disorder in timing. The occurrence of clinical schizophrenia depends on the severity of the intrinsic disturbance and the effects of maternal and environmental influences.

ASSOCIATION OF CLINICAL PSYCHIATRIC DISEASE WITH HYPEREMESIS GRAVIDARUM. S. B. Guze, W. B. DeLong, P. W. Majerus and E. Robins, New Engl. J. of Med., 261: 27:1363-1368, 1959.

The incidence of psychiatric illness in 48 white and negro women with hyperemesis gravidarum, who were followed for 3½ years, was 14% in the white and 51% in the negro women. Compared with an appropriate number of controls, it was noted that only hysteria was observed more frequently (15% as compared to 2% of controls).

THE FREQUENCY OF SUICIDE. Statistical Bulletin. Metropolitan Life Insurance Co., December 1960.

There are more than 18,000 suicides each year in the U.S. This is at least twice the toll taken by homicide and 12 times the loss of life in all types of aircraft accidents.

The suicide rate in the U.S. is several times greater than that of Ireland and Greece, but no more than half that recorded in Austria, Hungary, West Germany or Japan.

In 1958 over half of the white males who committed suicide used firearms. Poisoning and hanging each accounted for nearly one fifth of the suicides among males. In white females, poisoning accounted for more than one third of the total deaths. Firearms ranked second, being employed by one fourth of the female victims.

THE EPILEPTIC IN RELATION TO PREGNANCY. H. Dimsdale, Brit. Med. Journal, 5160: 1147-1150, 1959.

The metabolic changes that occur during pregnancy may increase the occurrence of seizures. Excessive gain in weight and sodium retention may precede the onset of increased attacks. Status epilepticus is rare, but serious when it occurs late in pregnancy; the mortality rate is higher than that of eclampsia. The author advises that the epileptic woman should not be discouraged from pregnancy unless she is demonstrating difficulties in control while non-pregnant. Dosages of anti-convulsant medications frequently require adjustment during pregnancy.

W.D.

Book Reviews

THE CENTRAL NERVOUS SYSTEM AND BEHAVIOR. Edited by Mary A. B. Brazier, D.Sc. New York: Josiah Macy, Jr. Foundation, 1960. 475 pages. \$7.50.

This book, dedicated to Dr. C. Judson Herrick, the world famous neurologist, is the report of the transactions of the third conference held at Princeton, N. J., in February 1960 under the sponsorship of the Josiah Macy, Jr. Foundation, with the cooperation of the National Science Foundation. There were seventeen members and thirteen guests. The book contains ten chapters, the last being a translation from the Russian medical literature. The whole is well indexed.

The chapter on the evolution of man's brain is particularly well presented, and any general practitioner will find it stimulating reading. On page 124 may be found a graphically presented illustration showing the development of the child during the first two years.

This book will be used more as a reference than as easy reading. It is particularly valuable for this since each chapter is followed by an extensive list of references.

James L. McCartney, M.D.

A HISTORY OF PSYCHIATRY. By Jerome M. Schneck, M.D. Springfield, Ill.: Charles C. Thomas. 196 pages, \$5.50.

It is a pleasure to welcome this compact, readable volume. Although it does not have the completeness and style of Gregory Zilboorg's history, the perspective is excellent. For the undergraduate student, the postgraduate student, and the busy practitioner, the concise chronological presentation will be very welcome and helpful.

There are new and recent researches presented. The opinions and interpretations from recent publications in professional journals have been well integrated into the discussions of the major historical trends and achievements.

The contents are well arranged with enough flexibility in the chronological sequence to make for more interesting and better interrelated reading.

In several places the reader may be slightly disappointed, or frustrated with the paucity of details. This may be overcome by referring to the very good list of references at the end of each chapter. The glossary and index are also good.

Joseph Joel Friedman, M.D.

CHEMOTHERAPY IN EMOTIONAL DISORDERS by Frederic F. Flach, M.D., and Peter F. Regan, III, M.D. New York: McGraw-Hill Book Company, 1960. \$10.00.

The authors of this volume "hope that it may be of interest and value to . . . all physicians who are confronted with the responsibility of helping the emotionally ill patient." To achieve this goal the book has been designed to increase the effectiveness with which doctors employ physiological treatments, particularly the newer psychopharmacologic agents, by providing a basis for integrating somatic treatment with psychotherapy. The latter is considered by the authors to be a fundamental, indispensable element in the treatment of anyone with a psychopathologic disturbance. Somatotherapy is considered to be secondary and best utilized in the setting of dynamically oriented therapy.

Chemotherapy in Emotional Disorders is divided into three sections. The first, devoted to the evaluation of the patient for treatment, is the most valuable. Here the clinical experience, astuteness and competence of the authors are easily discernible. It contains some insights garnered from many hours of patient contact which any psychiatrist would find valuable.

The second section, dealing with the clinical effectiveness of somatic therapies, covers chlorpromazine and related phenothiazine derivatives; reserpine; barbiturates; meprobamate; ECT; stimulants and antidepressive agents; insulin treatment and lobotomy; endocrine therapy and miscellaneous drugs. Any physician experienced in the use of these various physical methods of treatment will find nothing new here. Instead, he will detect the limited experience of the authors and their lack of familiarity with the literature. For example, chlorpromazine has been available for six years and thousands of articles on this drug have appeared. Yet the authors state: "No patient should receive chlorpromazine unless physical examination and laboratory investigation reveal intact hepatic function" (pg. 93). In this reviewer's opinion, chlorpromazine has been given safely to many people with liver dysfunction. To detect early agranulocytosis or liver damage from chlorpromazine the impractical recommendation is made: "During the course of treatment, temperature should be taken regularly" (pg. 93).

Shortly after chlorpromazine was introduced, some clinicians, on the basis of very limited experience, held that combined chlorpromazine-ECT should not be used. Subsequent studies by others showed this to be erroneous. The authors, however, write: "It is now considered desirable

to allow a minimum period of 72 hours to elapse between the termination of drug treatment and the institution of ECT in order to reduce the risk of cardiovascular complications" (pg. 94). This is followed by the questionable and certainly unproved comment: "Moreover, when shock treatments are given within a week after the end of chlorpromazine treatment, post-ECT confusion and memory loss occasionally seem to be more severe" (pg. 94).

The authors admit the lack of evidence for addiction to any phenothiazine but state: "Experience suggests, however, that habituation may develop, as with barbiturates, presenting an equally complex management problem" (pg. 94). Perhaps their experience suggests that habituation may develop but thus far no validated cases have been reported. In fact, clinicians with extensive experience have commented repeatedly that habituation with the phenothiazines does not happen.

For catatonic and paranoid excitements "chlorpromazine will not work as rapidly as ECT in bringing excitement under control" (pg. 235), but phenothiazines, especially chlorpromazine, "have proved to be a very valuable addition to the treatment of manic excitements" (pg. 260), say the authors. Actually any phenothiazine equi-potent or more potent than chlorpromazine will quickly control any excitement, providing the drug is given in adequate doses. The technique of chlorpromazine therapy for manic excitements outlined by the authors is antiquated. Why take several days when a much more effective dose can be given initially?

The authors equate all phenothiazines and make no distinctions relative to potency, propensity to cause various side effects and therapeutic effectiveness. Instead, they say that all phenothiazines produce the same complications without indicating the marked differences in the frequency and severity of the side effects caused by these drugs. They claim that the addition of a piperidyl ring into the side chain "often seems to reduce the frequency of jaundice and blood dyscrasias, but it often increases the tendency to develop parkinsonlike motor and coordination dysfunction" (pg. 102). The fact is that jaundice and agranulocytosis have been caused proportionately more often by phenothiazines with a piperidyl ring in the side chain, such as mepazine, than by the other phenothiazines and that extrapyramidal reactions are very infrequently induced by piperidyl phenothiazines.

With all the advances in the technique of electroconvulsive therapy, it is surprising to read: "At the time of treatment, he is placed on a specially constructed table, or on a bed which is supported by bedboards, in a reclining position.

His body is placed in dorsal extension by a sandbag placed under the dorsal vertebrae or by the construction of the table" (pg. 143). Bedboards, sandbags, etc., were abandoned long ago by most shock therapists. The authors do not routinely use sedation and anesthetics in conjunction with ECT stating: "It seems advisable to hold the use of these drugs to a minimum, in order to prevent the complications which results from the addition of medications to an otherwise straightforward treatment" (pg. 144). Such comments suggest that they have not kept abreast of the developments with ECT.

The chapter on lobotomy is a poor review. It contains little to indicate that the authors have read the literature on the developments and progress in psychosurgery.

The material on new psychopharmaceuticals is generally quite brief. Some drugs are cursorily dismissed; others receive more attention than their proven therapeutic value would justify. For example, referring to Deprol, the authors simply say: "It was employed with some measure of success in the treatment of patients with mild and moderate degrees of depression of mood. However, these observations have not been sufficiently substantiated to warrant its use as an antidepressive drug" (pg. 209). Not a few articles would challenge this observation. Too little attention is given to important drugs such as the antidepressants and too much space is given to compounds for which the indications are limited.

The third section, which covers the integration of treatment methods, is not as weak as part two. The major premise of the authors is that psychotherapy is the prime method of treatment and that somatotherapy is secondary. Even though the authors acknowledge the value and effectiveness of somatic therapies, they state: "In the majority of patients with psychoneurotic illnesses, somatic therapy is not ordinarily indicated" (pg. 229). They imply that ECT can terminate depression when it occurs in a schizophrenic but "the administration of ECT must be timed in such a way that, when the depression is cleared, the patient will be able to see that he has techniques for dealing with the world. If ECT is administered before the proper psychotherapeutic groundwork has been laid, the remission of the depression will be only temporary" (pg. 241). Later they write: "In the intensive psychotherapeutic treatment of manic-depressive depressions, ECT plays only a small role. When sufficient progress has been made psychotherapeutically, it is sometimes observed that the patient who is otherwise prepared to become well and remain well stays in a state of chronic depression. In such a situation, it is frequently

possible to terminate the depression artificially by means of six to eight ECT's administered two to three times per week. It (ECT) must be used very sparingly, however, in the course of treating manic-depressive depressions. In such instances, the lack of sufficient psychotherapeutic progress will almost inevitably result in a recurrence of depression, and ECT becomes less and less effective with each repetition" (pg. 255). Also ECT "can only be effective after the basic psychoneurotic defense mechanisms have been dealt with" (pg. 258). These statements suggest that the authors believe that psychotherapy is more efficacious than ECT for depression, a contention with which many would disagree. They also imply that psychotherapy must precede ECT in the treatment of neurotic and endogenous depression to prevent a recurrent depression. This is contrary to the clinical facts for, thus far, there is no proven technique for preventing later depression in either neurotic or manic depressive patients.

This book is well bound, the type is easy to read and the style is lucid. Separating the gold from the dross in its contents demands a critical reader. There is much that is worth while in this volume but it is hardly a book for the general practitioner or the psychiatrist who has used physical methods of treatment or wants to learn the art of chemotherapy for emotional disorders.

Frank J. Ayd, Jr., M.D.

(EDITOR'S NOTE:)

The editor was prompted to read this book after noting the reviewer's comments. It seemed strange that the three sections described should differ so markedly. It was found that the authors have made a brave and unusual attempt to integrate the "directive-organic" with the "psychodynamic" approaches to emotional illness. Too frequently, one is completely adherent to either one or the other. Their plea is for co-existence—which is tough enough—but especially so when this state of affairs is required to take place within one individual. They readily admit that this is difficult to achieve. (One might add that it may sometimes seem impossible.) Since their views seem so closely allied to those of the Academy of Psychosomatic Medicine and of its journal, *Psychosomatics*, this alone would warrant editorial intervention.

This book is courageous and challenging. It is also valuable—provided that the reader shares the same values, prejudices and convictions as the authors.

Perhaps if the authors used their subtitle "The Psychotherapeutic Use of Somatic Treatments" as their title, the reviewer would have found fewer objections, since this latter title is unquestionably more fitting to its contents. W.D.

DEPRESSION: MOOD, SYMPTOM, SYNDROME.

R. A. Cleghorn, M.D., and G. C. Curtis, M.D.
Documenta Geigy; Acta Psychosomatica, No. 2,
J. R. Geigy, Basle, Switzerland.

This monograph is geared to provide the non-psychiatrist as well as the psychiatrist with basic information. In the historical introduction, melancholia is traced back to the black bile and phlegm of Hippocrates. The contributions of Aretaeus, Galen, Mercurialis, Boerhaave, Pinel, Esquirol, Falret, Kraepelin and others are mentioned. In "Concepts of Depression," the differences between normal mood changes and pathological states are emphasized.

In "Clinical Aspects," the varying pictures are presented. The four cardinal vegetative signs are noted to be: 1) insomnia, especially early waking; 2) anorexia and weight loss; 3) constipation; and 4) reduced or absent menstruation in women and loss of desire and impotence in men.

In their discussion of somatopsychic depression, the authors point up that it may be pharmacological (reserpine and adrenal steroids); post-infective, metabolic (Addison's Disease); pre-menstrual or post-partum. Considerations of the etiology stress the interplay of somatic and psychological factors.

This monograph, a worthy successor to Acta Psychosomatica #1, is a most worthwhile contribution. One can only wait and hope that future monographs will cover other aspects of this prevalent and most painful illness.

PSYCHIATRY IN THE MEDICAL SPECIALTIES.

Flanders Dunbar, M.D., Ph.D., New York: McGraw-Hill Book Co., 1959, pgs. 535. \$12.00.

In this book by the late Flanders Dunbar, a pioneer in psychosomatic research, the author emphasizes the persistence of the dichotomy between psychogenic and physiogenic disorders. She rightfully feels that it should not be a question of "either/or" but how much of each is present. There are many excellent chapters; the case studies help clarify many difficult problems. "Taking the History" points up the doctor's need to "avoid thinking of the patient as a spoiled child, martyr, coward or hero," since these labels imply moral judgment. The value of focusing one's attention on the stress situation and the evaluation of the patient's capacity to compensate are emphasized. The chapters on "Psychoneuroendocrinology" and "Neuroendocrine Relationships" are also valuable, as are her contributions to the evidence that psychosomatic disease and psychosis may be reciprocal (pg. 322).

There are, nevertheless many weaknesses. Some are related to the difficulty in parting with

old ideas and attitudes (even for a psychoanalyst). Dr. Dunbar's preoccupation with "personality profiles," in which "distinctive characteristics" for different diseases are present; her distinction between "coronary personalities" and "anginal personalities" is difficult indeed to accept. When she adds that the ones with a "weaker ego" (pg. 102) are more likely to have hypertension as well, one can understand why "psychosomatic medicine" has had its problems. In her discussion of personalities of cancer patients, it is stated that they "have appeared to be happy people, but this surface conceals a secret sense of lack of fulfillment in creative ability, . . . a confusion about goals and the reason for living (pg. 144) . . . Cancer patients with exceptional resistance to neoplastic growth manage to avoid or reduce stress. . . ." These statements may be difficult to swallow; even some psychoanalysts may suffer dysphagia. To add fuel, she continues (pg. 145): "cancer-prone patients tend to be consistently serious, over-cooperative, over-nice, over-anxious, painfully sensitive, passive, apologetic personalities, suffering from a pitiful lack of self-expression and self-realization all of their lives." One wonders whether these histories were taken in the throes of terminal illness when reactive depression and adhesions and metastasis to the mattress have occurred. In her discussion of carcinoma of the breast (pg. 148), she mentions that the "victims have shown intense conflict over nursing . . . that they disliked having their breasts tampered with by men . . ." In a note of finality, she relates the story of the woman with a lump in her breast who while waiting for a hospital bed for surgery, decided to spend two weeks in psychotherapy. The lump "disappeared," but to Dr. Dunbar this came as no surprise.

Added to these mystical and romantic theories, Dr. Dunbar makes the statement (pg. 380) "that the physician who uses drugs may well remind himself that recourse to drugs in order to overcome resistance during psychotherapy may indicate a weakness in his own technique." In this reviewer's opinion, the doctor (psychiatrist or non-psychiatrist) who fails to make use of some of the newer drugs in treating many (but not all) of his disturbed patients is practicing mediaeval medicine.

One additional statement requires criticism. The author feels that "ECT should be used only as a last resort" (pg. 453). One can only comment that ECT for severe endogenous or involutional depression is one of the few specifics in all of medicine.

Despite these critical remarks, this book is valuable for the non-psychiatrist seeking a better orientation; the psychiatrist, too, will find that the text offers some contact with the soma. Dr. Dunbar was a pioneer who contributed much to psychosomatic medicine; unfortunately, she, too, had a few blind spots. I'm certain she would readily agree.

MEANING AND METHODS OF DIAGNOSIS IN CLINICAL PSYCHIATRY. Thomas A. Loftus, M.D. Philadelphia: Lea & Febiger, 1960. Pgs. 169. \$5.00.

This is a different and extremely valuable contribution. It is unique in that it stresses a sharpening of diagnostic acumen rather than merely furnishing descriptions of symptoms. It should be of particular value to the generalist or non-psychiatrist who seeks a firm foothold in psychopathology and is not too concerned with the different schools of psychiatric thought. Speculation and theorizing are held to the barest minimum.

A most valuable portion of the book is devoted to comparative case histories, where the diagnostic entities are charted side by side in tabular form. Another valuable section is the one on history-taking. The author cites many examples where the wording of one's questions makes for vast differences in the patient's responses.

An interesting chapter is devoted to the various levels of cooperation of the patient. Ranging from the need for magic, to the parentifying level up to the self-reliant stage, the author provides examples of each in the patient's attitude, thinking and behavior. This information, if assimilated, should enable the physician to understand and cope with some of the demands of difficult patients.

W.D.